EDUCATIONAL STATUS AND ITS ASSOCIATION WITH RISK AND PROTECTIVE

FACTORS FOR ABORIGINAL YOUTH IN ALERT BAY, BRITISH COLUMBIA

by

Kimberly Ann van der Woerd,

B.A. (Hons.), Simon Fraser University, 1998

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the

Department of Psychology

Canada

ABSTRACT

This study included the administration of the 127-item Aboriginal Youth Health Survey. The purpose of this study was to determine how school and family connectedness were associated with delinquent and health promoting behaviors, and whether school attendance was associated with delinquency and health status for First Nations youth. In total, 131 Aboriginal youth (55% female, 45% male) from Alert Bay, B.C. participated. It was found that higher levels of school connectedness (not family connectedness) were associated with lower levels of delinquency, but not associated with health and well-being measures. When individual delinquency items were contrasted, participants who dropped out were more likely to be addicted to alcohol and marijuana than participants' in-school/graduated. Both participants in-school/graduated and youth who dropped out reported similar levels of health and well-being. Of particular interest is the finding that youth who had been pregnant or were parents revealed a similar profile as those youth who dropped out of school. Participants who dropped out reported many reasons for dropping out including pregnancy, problems at home or at school, and employment. In total, 57% of those who dropped out of school reported that they did not talk to anyone about the decision. Of those youth who did talk to someone, most reported that they talked to their parent or a friend. Limitations to this study and possible interventions to keep First Nations youth in school are discussed. This study is founded on the assumptions that it is more advantageous for adolescents to be in school than out of school, that any education is superior to no education, that there are explicit social costs that society must bear when adolescents drop out of high school, and to improve

completion or graduation rates, society or community members must find a way to

encourage teachers to work with those youth at risk, and encourage the youth themselves.

ACKNOWLEDGMENTS

Table of Contents

List of Tables

List of Figures

List of Appendices

Introduction

Aboriginal[1] people have been living in unacceptable conditions of neglect,

malnutrition, discrimination, and poverty (Ministry of Aboriginal Affairs, 2000; Kelm,

1998). Consequently, Aboriginal youth continue to face special challenges during the

transition to adulthood, including geographic isolation, poor economic conditions, living

in single parent families, and abuse. Furthermore, Aboriginal and other minority youth

show elevated risk for dropping out of high school, and have been found to be more

likely to engage in risky behaviours, such as substance use and delinquency (Cummins,

Ireland, Resnick & Blum, 1999; Ripple, 1996). However, it is not always the case that

Aboriginal youth have done poorly with respect to healthy outcomes. Research conducted

by Cummins et al. (1999), Tonkin et al. (2000), and van der Woerd, Tonkin, and Cox

(2000) found that Aboriginal youth who attend school are, for the most part, doing well.

Furthermore, youth who reported high levels of connection to school and family were

less likely to engage in maladaptive behaviors, and more likely to have higher levels of

emotional and physical well-being. This thesis explored factors associated with dropping

out of high school for Aboriginal youth. It was hypothesized that attendance in school

and high levels of connection to family and school were protective factors when

considering overall health of Aboriginal youth. Furthermore, it was expected that higher

levels of connection to family and school would be associated with school completion.

---

[1] The terms Aboriginal, First Nations, and Native will be used interchangeably and will all be intentionally capitalized. This terminology will be used to define the first inhabitants in Canada and the United States (Native Americans, Native Indians), also including the Métis, Innu and Inuit people. The term "Indian" will be used in reference to government policies (such as the Indian Act) or in direct quotations only. There are various philosophical and political reasons why some terms are accepted by some and rejected by others (Guno, 2000). It is not the intention to group First Nations peoples into one homogenous group. I value and respect the diversity of beliefs and attitudes that exist among First Nations people.

To begin, I will review the history of educational experiences in Aboriginal communities in Canada. This will be followed by an overview of the significance of this problem, and a brief literature review. Finally, a study comparing Aboriginal youth in school and those who have dropped out of school in British Columbia (B.C.) communities will be described.

Historical Perspectives

To fully comprehend the multifaceted social issues presently faced by Aboriginal peoples, "researchers are expected, by their communities and by the institutions which employ them, to have some form of historical and critical analysis" (Smith, 1999, p.5). This expectation is etched in the belief that current difficulties are embedded in the longstanding, wide-ranging, and deeply entrenched oppressive ideologies of the Indian Act and other government policies (Guno, 2001). Furthermore, "to remove barriers to equality in education, it's important to understand the history of Canada's relationship with Aboriginal peoples...the past ... has important contemporary and practical implications, because many of the attitudes, institutions and practices that took shape in the past significantly influence and constrain the present" (B.C. Human Rights Commission, 2001, p.8). It is beyond the scope of this paper to conduct an exhaustive review of all the intricacies associated with the Indian Act, the Indian Education Policy and the myriad of amendments over the past century and a half. Instead, this paper will briefly introduce the wide spread beliefs and attitudes that propelled the policies, identify key historical events relating to Aboriginal education, and delineate the impact and outcomes of the policies.

European/Western colonizer's attitudes toward the people that they colonized were voiced in the debates on whether Native peoples were in fact human beings or whether they deserved human rights. These beliefs are evidenced by:

> One of the supposed characteristics of primitive peoples was that we could not use our minds or intellects. We could not invent things, we could not create institutions or history, we could not imagine, we could not produce anything of value...we disqualified ourselves, not just from civilization but from humanity itself. (Smith, 1999, p.25)

For those who were more generous to believe that Native peoples were human beings, they justified policies in the Indian Act as a measure to 'civilize', 'assimilate', and 'protect' those who were not capable of dealing with Europeans, or unable to adopt Euro-Canadian ways such as reading/writing in English or French, be free of debt, and have good moral character – interestingly, many whites at the time could not uphold these standards (Tobias, 1976). These attitudes lay at the foundation of the Indian policies of 1815, including Euro-Canadians' attempt to civilize, assimilate, and also Christianize First Nations people. These attempts and intentions were all shielded under the notion of being humanitarian, saving the First Nations people from themselves (Tobias, 1976). Key historical events that stemmed from these attitudes will now be addressed.

In 1815, a policy was adopted to civilize the First Nations people, as an important aspect of the Euro-Canadian-First Nations relationship. A reserve system for land was conceived, and by 1850, lands that First Nations people lived on were given special status by protection from trespass by non-First Nations people (Tobias, 1976). At the same time, in the 1850s and 1860s, cooperation between the government and churches was established and facilitated the expansion of boarding schools and industrial schools. At the time, schools on the reserve were not attended by First Nations children, and were

thus seen as ineffective in the government and church's efforts to civilize children. It was thought that residential or industrial schools would be more effective in civilizing children by removing the youth from their homes which were considered unclean and diseased, from their uncivilized parents and cultural traditions (Tobias, 1976). Central to this belief was the notion that Aboriginal women were poor mothers (if unassimilated), and Aboriginal parents were negligent as their homes were associated with dirt, disease and death (Kelm, 1998). Residential schools were therefore designed to introduce social control and a homogenous body of educated students (Kelm, 1998). In 1876, the Indian Act contained the phrase "seize body and mind", which was the legal validation for the residential school system, and the 1894 amendment to the Indian Act included empowering the governor-in-council to commit children to the boarding and industrial schools – both amendments weakening the power of First Nations peoples (Tobias, 1976).

Advocates of the residential school system believed that First Nations children were inherently unhealthy and should be trained in public health and domestic sciences, thereby increasing their chances of survival, and also to be assimilated into Euro-Canadian society (Kelm, 1998). Other advocates of the system include: General Pratt, when setting up the first American Indian school was quoted "Our purpose is to kill the Indian and save the man"; or Clifford Sifton, the Department Superintendent of Indian Affairs was quoted "do not worry, we are not going to educate Indians to compete with white men for their jobs"; and finally John A. MacDonald, the Prime Minister of Canada was quoted "I think we must, by slow degrees, educate generation after generation, until the nature of the animal almost is changed by the nature of the surroundings" (Nuu-Chah-

Nulth Tribal Council, 1996, p.193). Advocates for the residential schools believed that this system would protect Aboriginal children's physical, social and spiritual survival, and the first step the children should embrace in the path to healthy living was cultural alienation (Kelm, 1998).

The first residential school was established in Mission, B.C. in 1863, and by 1880, there were 11 residential schools in Canada. In 1867, The British North America Act established Indian education as a federal responsibility, and by 1869, Canada adopted the "Aggressive Civilization" policy used by the United States in their residential school system. In 1879, a per capita grant was established, allowing $110.00-$145.00 per Aboriginal student, per year. The government would also provide the land, buildings and equipment for the schools (Nuu-Chah-Nulth Tribal Council, 1996). In 1909, 88 residential schools were in operation, again, with the goal to 're-form' Aboriginal bodies, which they did do (Kelm, 1998).

The residential school system was a significant stratagem in the endeavor to colonize and assimilate Aboriginal peoples. The curriculum in school included domestic and health sciences. As the Catholic, Anglican, and United churches were central to this venture, the school system provided an opportunity for them to proselytize to the children. Other instruction included teaching the Aboriginal children that their native languages and customs were bad, that they were to submit to the authority of white people, that they had to maintain control and power in social relations, that they should adhere to military style discipline, and that they should defy all authorities in their home communities (Nuu-Chah-Nulth Tribal Council, 1996). Soon, 'health' and 'Christianity' were equated, and the children were instructed to "recast their own families according to

the new health rules of the dominant culture to gain entrance into the 'Kingdom of

Health" (Kelm, 1998, p.63). There existed a considerable irony, as Aboriginal children

were learning about dietary standards and the four food groups, the health and safety

standards of the schools were so low that morbidity and mortality rates actually increased

for Aboriginal children (Kelm, 1998).

The colonization attempts and residential school system were all conducted under

the guise of humanitarian efforts, that the powers were saving, protecting and

assimilating the Aboriginal people. The residential schools had very deleterious outcomes

such as the higher morbidity and mortality rates mentioned above. These schools did not

preserve the health of the children, as at least one-quarter of the children died while on

the school roll, and when data from Aboriginal children post-school were included,

nearly 7 out of every 10 children died (Kelm, 1998). The residential schools perpetuated

illness in a couple of ways (Kelm, 1998). First, Aboriginal children were made more

susceptible to disease by malnutrition, living in inadequate and run-down shelter which

were damp and unheated, enduring physical and psychological abuse at the hands of the

teachers, and overworking on the farms and other such menial chores. Second, children

who were sick were still required to attend residential schools, even with contagious

diseases like tuberculosis (TB), typhoid, dysentery, influenza or whooping cough, thereby

putting other children at risk of contracting the disease. It should be noted that children

with TB were technically barred from school, but they were sent to school in part to get

treatment, and also because there were no sanatoriums for them to go to – sanatoriums

did exist for those sick with TB, but Aboriginal patients were not admitted. If the children

were too sick and about to die, they were sent home, the practical side of that being one

less death to investigate at school. Mortality and morbidity rates increased for Aboriginal children sent to residential schools.

There were a number of other impacts as a result of the residential school system, relating to the emotional health of the children who attended residential school, their families, and the community (Nuu-Chah-Nulth Tribal Council, 1996). To begin with, the children were separated from their parents, siblings, homes, extended families, community, and territory/land. When at the schools, the children were taught to hate their language, food, and culture, their hair was cut short and they were taught to compete with their own relatives, not cooperate. As a result, they felt physical and cultural dislocation, along with separation from family traditions. When the children could finally come home, they were no longer able to understand family traditions and unable to cope with the freedom. The loss of identity also facilitated a loss of self-respect, created low expectations, and alienation from their culture. The children were also emotionally, physically and sexually abused, enduring public humiliation, physical confinements, beatings (sometimes while naked), withholding food, being forcibly fondled or forced to fondle staff, and sometimes being gang raped by other students. As a result, the children learned inappropriate behavior patterns, became disrespectful of 'ignorant parents' and traditions, and in the long run, lacked parenting skills. Finally, the children were subjected to physical labour, where they were kept at the school not to learn, but as free labour. In addition to increased mortality and morbidity rates, the residential school system also wreaked havoc on the emotional well being of the children and their families. The community was also affected, dealing with the grief and loss of their children and cultural traditions.

Despite the atrocities associated with the residential school system, there were strengths that are worthwhile mentioning. Liebich (2001) claimed that although the residential schools did not fulfill their purpose of cultural assimilation, they did create a new group of Aboriginal leaders who are determined not to let this happen again, and stand up for their culture. One group of leaders was the parents of the children taken away to residential schools (Kelm, 1998). The parents saw the devastating effects on their children and families, and demanded that schools be built on reserves so that children were not taken from their homes. Parents asserted that schools were negligent caregivers, not parents. Some people took drastic measures to protect themselves from the residential school system, including parents going to jail for not sending their children, and children escaping the school into the severe environmental elements, sometimes to their death. In addition, the schools provided some students with a sense of pride, a sign that they were stronger because they made it through the difficult times of the school system (Liebich, 2001). In that sense, Aboriginal people never gave up their power. While they did not have a 'power over', they did maintain a 'power to' resist assimilation, power to create means to preserve their identity, power to control and survive (Kelm, 1998). In this respect, Aboriginal people let their voice be heard, as they did with other issues like health care and the numerous amendments to the Indian Act. Aboriginal people as a group became mentally tough, survivors.

In the 1960s, 100,000 Aboriginal children were attending residential schools across Canada. In 1960, First Nations people won the right to vote which coincided with the eventual demise of the residential school system. Aboriginal children were integrated

into the public school system and allowed back to their homes and families (Nuu-Chah-Nulth Tribal Council, 1996).

It is very important to reflect on educational values of Aboriginal peoples. All societies have education, but the structure, styles or methods, along with the efficacy will vary (Watt-Cloutier, 2000). To measure the efficacy of education, one needs to determine how well it prepares the student for the opportunities and challenges of life, all the while remembering that efficacy will change as life changes. In that sense, life for Aboriginal peoples has changed dramatically over the past century, and the future depends on how well Aboriginal children are prepared for life through their education (Watt-Cloutier, 2000). It is also important to honor their past as a means of respect and understanding of their current situation. To honor the past, for centuries and for several generations, Aboriginal people knew how to prepare their children for challenges and opportunities, fostering a sense of pride, self-determination and resilience. In order to successfully meet the challenges of changing times when Europeans settled on Canadian land, Aboriginal parents resisted, but were willing to let their children go to school (Watt-Cloutier, 2000). It can be concluded that:

> Education is the most powerful institution in any society, and teachers are its most powerful agents. As Aboriginal people we know this very intimately. Education has been a force for destruction. It is also a powerful force for construction, and it can produce citizens who are capable of determining their own future. (Williams, 2000, 145)

Significance of the project

"High school dropouts: The numbers are startling, situation especially drastic for males, Aboriginals", that was the headline on the front page of the local newspaper (Steffenhagen, 2001a). The current state of Aboriginal education has merited the

attention from a variety of organizations, from government agencies to non-profit agencies, along with local media attention. All of the reports and data generated point to the significance of the dropout problem for Aboriginal youth. These reports will be reviewed below.

The front page of the Vancouver Sun highlights the startling numbers of high school dropouts, noting that Aboriginal youth were particularly susceptible to dropout of high school (Steffenhagen, 2001a). In particular, the article stated that some youth leave school because they have "screwed up," drifted away, had babies, or found a well-paying job. The article also noted that the B.C. education ministry has promoted a "stay in school" theme, but have very little information on why students leave and what could be changed to encourage them to stay. Steffenhagen pointed out the difficulties in obtaining data that quantifies how many youth have dropped out, given that some youth transfer to different schools or provinces. Consequently, school graduation rates have been used as indicators of outcomes of the secondary school system, and the education agencies have said that "the provinces need to make greater efforts to find out why students are leaving school and what might encourage them to stay" (Steffenhagen, 2001a, A9). In a subsequent article, Steffenhagen reported that grade 8 was a difficult time for students and dropout rates increased at that time. This article recommended that in order to keep youth in school to graduation, high levels of connection to school, teachers and peers should be fostered, and change some structural patterns at school (Steffenhagen, 2001b)

In 2001, the Ministry of Education reported that 61% of Aboriginal youth did not graduate within 6 years of beginning grade 8. This figure is 1% lower than the completion rate reported in 2000 (Ministry of Education, 2001). Aboriginal students have

left school at significantly higher rates than Non-Aboriginal students, and at younger

ages, leaving school at the age of 14, while Non-Aboriginal students do so around the age

of 16. Compared to urban areas, some rural areas of B.C. experienced lower rates of

youth completing high school, with completion rates ranging from 1% to 63% between

school districts (Ministry of Education, 2000). It was noted that pregnancy and

parenthood are two possible reasons why Aboriginal youth may leave school early.

Furthermore, Aboriginal students have been disproportionately represented in Special

education categories such as 'severe learning disability', 'behavior disorder

rehabilitation' and 'severe behavior', and are underrepresented in the gifted category. It

has often been the case that these special education designations are a result of

preventable medical conditions such as Fetal Alcohol Syndrome or Fetal Alcohol Effect

(Ministry of Education, 2001). In sum, data from the Ministry of Education for the years

2000 and 2001 indicated no significant changes occurred with respect to the educational

status of Aboriginal youth. Recommendations in their report included the need to

understand the complexities of racism, facilitate active cooperation between parents and

the community, and "find out what makes school a successful experience for Aboriginal

students and share the results" (Ministry of Education, 2001, p.29).

The Performance Plan developed by the Ministry of Aboriginal Affairs noted that

Aboriginal peoples live in a reserve system that does not work, and under the Indian Act

which has systematically worked to assimilate and "civilize" Aboriginal people (Ministry

of Aboriginal Affairs, 2000; Tobias, 1976). The Performance Plan specified that issues

pertaining to youth are of utmost concern, and outline objectives and strategies to

improve the provision of services to Aboriginal youth. These strategies included raising

awareness about the issues pertaining to Aboriginal youth health, improving health care

so that Aboriginal youth can enjoy more healthy lifestyles, and increasing the number of

students participating and succeeding academically (Ministry of Aboriginal Affairs,

2000).

The importance of education for Aboriginal youth was evident in the summary

report entitled "*Consortium...Working Together to Improve Aboriginal Health*

Education" (Institute for Aboriginal Health, 2001). The specific policy objectives of this

consortium were multifold, beginning with determining ways to raise interest in health

careers within Aboriginal communities, and improving access for Aboriginal students

into health and human service programs. An important policy theme was the recognition

that communities need to be involved in advancing health issues, especially with respect

to increasing cultural pride and maintaining effective health programs. Specifically, the

involvement and support from the community and the family in the child's completion of

secondary education were identified as paramount in ensuring healthy outcomes.

In a report entitled *Barriers to Equal Education for Aboriginal Learners: A*

Review of the Literature, Mattson and Caffrey (2001) stated "it is obvious from the

literature and observation of the situation in British Columbia that Aboriginal children

and youth still do not receive equal education" (p.6). This report explored some of the

systemic barriers that have existed for Aboriginal students such as issues of control (for

funding and content of education), the impact of Indian policy and the residential school

system, the exclusion of families and the community, and the failure to address the

difficulties associated with reading, sciences and mathematics. It is concluded that

"education is a fundamental human right of all people, but for the Aboriginal community,

it may be particularly critical as a step to overcoming historical disadvantages" (Mattson & Caffrey, 2001, p.2). Findings in this report instigated the B.C. Human Rights Commission to conduct an inquiry into Aboriginal education. As of August 10th 2001, this inquiry was suspended. There has been no action on this inquiry since this date.

A B.C. Human Rights Commission report specified that equal education is a human right, and that to be consistent with Aboriginal tradition, education should be holistic – developing the intellectual, spiritual, emotional and physical aspects of the child (B.C. Human Rights Commission, 2001). It was noted that the current education system is not doing that, in part because of interpersonal racism, and the conspicuous denial of Aboriginal values, perspectives and culture in the curriculum. Furthermore, it was evident that a whole group of people were not benefiting from the education system, so it is the responsibility of educators to modify the system. Chief Ron Ignace of the Shuswap Nation concluded "education can be a weapon or a tool. In the past, it was used as a weapon...Today, Aboriginal communities want to use education as a tool to rebuild their nations, to strengthen their culture and language" (B.C. Human Rights Commission, 2001, p.10).

The economic costs of dropping out of high school are equally important to consider. It is beyond the scope of this paper to include a comprehensive description of drop out issues related to economic costs, rather, a brief overview of the findings in both the United States and Canada. Estimates of economic costs include the cost to society in terms of lost tax revenue, and costs to the individual in terms of lifetime earnings (Thompson, 1998). For example, the lower the level of educational achievement, the greater the economic cost to the community in the form of higher crime rates and

unemployment, greater dependence on transfer payments, and decreased health. There

has been clear evidence that the higher the education level, the greater set of skills, and

higher levels of productivity and lifetime earnings (Thompson, 1998). Many attempts

have been made to assess economic costs, for example, it was found that one additional

year of education raises the average hourly wage by 12-16 percent. Based on the 1990

U.S. Census data, it was estimated that the cost of high school non-completion is $727

billion, approximately 20% of the nation's income in 1989 (Thompson, 1998). The state

that spent the least amount on education was also the state that suffered the greatest

income loss because of youth who did not complete high school.

Canadian data on economic costs associated with dropping out of school is

similar, with those who dropped out of school earning between 70-98% less that those

who completed high school (Gingras & Bowlby, 2000). For example, the median wage

per week for women who dropped out was $260.00, compared to $336.00 for women

who completed high school. A positive relationship between wages and education level

existed, but it was not clear whether it was confounded by other factors such as screening

by employers, social skills or inherent ability. Chambers, Abrami, Massue, and Morrison

(1998) found that 72% of adults receiving social assistance did not have high school

education, and for the 137,000 youth who dropped out in 1989, more than 4 billion was

lost to Canadian society by way of tax revenue, salaries and the associated costs to

redress social problems. Furthermore, students who drop out of school were more likely

to work in blue collar, unstable jobs and have higher unemployment rates than students

who completed school. In Canada, like the U.S., societal costs included decreased health,

higher crime rates and less social cohesion (Gingras & Bowlby, 2000). For many

Aboriginal communities who already suffer high unemployment rates, isolation, overcrowded houses, and poverty, they can ill afford the economic costs associated with their youth not completing high school.

The report from the Ministry of Education and the media attention identify the extent of the current dropout and education problems for Aboriginal students. Information from the Institute of Aboriginal Health Consortium report and the B.C. Human Rights Commission identify issues relating to the existing inequalities in education for Aboriginal students and specify that changes need to be made such that education can help rebuild their nations. These reports, coupled with information on the economic costs all point to the significance of the present dropout problem for Aboriginal youth and communities, and the need for further understanding of why this happens.

Literature Review

Research has shown that many maladaptive behaviors such as teenage pregnancy, substance abuse, juvenile delinquency, and school dropout have overlapping risk and protective factors (Barton, Watkins, & Jarjoura 1997). Furthermore, there are many factors that influence school drop out, such as: the students' motivations, values, interests and previous experiences, parental attitudes and education status, school curriculum, teaching and support skills, peers values, and daily routines (Frymier, 1996). When a National sample of youth who dropped out were asked what were the reasons for dropping out, 21 typical reasons were cited, relating to peer influences, family constraints, school related variables, and adult role transitions such as employment or family obligations. Both male and female participants cited school related variables as their primary reason for leaving school, with male participants citing job related reasons

second, and female participants citing family related variables second (Jordan, Lara, & McPartland, 1996). There has been a considerable amount of research that has addressed the problem of youth dropping out of school, yet a paucity of research focusing on Aboriginal youth, especially in Canada. Government reports state that there is no consistent profile of youth who drop out of school in Canada, however, they do state that Aboriginal youth, particularly boys, are identified as being most susceptible to dropping out of school (Gingras, & Bowlby, 2000). There has been very little Canadian research that focuses on psychological and other factors that may be related to Aboriginal drop out rates. To that end, this literature review will focus on factors related to dropping out of school for non-Aboriginal youth, incorporating literature on Aboriginal youth where possible. This review will consider factors associated with dropping out of school by considering them on the individual, family, school and community level.

Risk factors on the individual level have included grade retention, the influence of peers and bonding with antisocial peers, pregnancy and parenthood, poor academic achievement, truancy, (Battin-Pearson et al., 2000; Roderick, 1994), and substance use (White, 1999). Grade retention is defined as requiring a student in a given grade level at one school year to remain at that level for a following school year (Jimerson, 2001). Grade retention has been found to be the most powerful predictor of dropping out of high school (Jimerson, Anderson, & Whipple, 2002). Chambers et al. (1998) found that grade retention was one of many predictors of school dropout, including poor school attendance, behavior problems and low SES. Queen (1994) found that daily failure by the student would eventually lead to grade retention, increasing the likelihood that the student would leave school early. Finally, Roderick (1994) found that grade retention was

associated with increased disengagement to school, increased truancy, and greater odds

of dropping out of school. The efficacy of grade retention is not without conflict,

especially with respect to associated outcome variables. Watkins, Wilson and Watkins

(1994) stated that grade retention was an ineffective, naïve, and an extreme response to

students experiencing deficiencies in some school subjects, given that students are

required to repeat an already unsuccessful experience without examination of what

brought on this failure.

Adolescents who were at risk of problems with school authorities were more

likely to have developed early conduct difficulties such as oppositional or antisocial

behavior. Consequently, these youth were more likely to have affiliations with antisocial

peers, and thus, reduced commitment to educational achievement. Interestingly, there

were no differences found between male and female participants, because it was found

that the developmental process was the same when early conduct difficulties were present

(Fergusson & Horwood, 1998). Adolescents who are at risk of dropping out of school

have been found to have few same-sex friends, few school friends, and more working

friends, older friends, and are more often employed (Ellenbogen & Chamberland, 1997;

McNeal, 1997). Future high school dropouts were found to be more likely to have been

rejected by their school peers, feel less popular, and have a sense of disconnectedness

with school. Furthermore, the friendship network of adolescents at risk for dropping out

of school has been found to be increasingly more populated by youth who have already

dropped out of school. It was also found that in addition to earlier maturation rates,

females had greater pressure to choose between a family and career earlier than males,

and were thus more likely to have a greater presence of friends who dropped out in their

social network. Finally, it was also found that youth at-risk for dropping out were not more influenced by peers than those youth who graduated from high school (Ellenbogen & Chamberland, 1997).

The Ministry of Education noted that pregnancy and parenthood were the primary reasons Aboriginal students dropped out of school. Other research has noted that pregnancy and parenthood have been associated with dropping out, especially for ethnic minority youth (Marin, 1995; Martinez, & Cranston, 1996). Davison-Aviles, Guerrero, Barajas-Howarth and Thomas (1999) conducted a series of focus groups with Chicano/Latino adolescents to determine why these youth dropped out of school. Certain group themes evolved, such as adolescents who dropped out were truant, often in alternative education programs, and experienced pregnancy or parenthood. Davison-Aviles et al. (1999) found that pregnancy or parenthood was a response to difficulties with other students and the school, and hypothesized that youth who got pregnant made a conscious decision, and wanted to leave school. It was also found that gender effects, such as differing patterns of perspectives on alternative programs and expectations of teachers and staff, obscured the findings. Franklin and McNeil (1990) noted that there was a trend toward increased middle-class female adolescents dropping out of high school. It was found that these females did not qualify for alternative education programs because these females were likely to have socio-emotional problems such as drug or alcohol abuse, family dysfunction, or pregnancy. Kaminski (1993) conducted a study looking at rural youth who drop out of school. In total, five major responses were cited when asked why did the youth drop out of school, and the major gender difference was pregnancy. Kasen, Cohen and Brooks (1998) conducted a study where they considered

the role of school experiences in adolescent delinquency and pregnancy. It was found

lower levels of IQ and family SES was associated with pregnancy and dropping out.

Furthermore, the risk of pregnancy and other delinquent behaviors decreased when the

school setting emphasized learning.

Poor academic achievement and dropping out of high school have been related to

greater levels of psychological distress such as depression and suicidal ideation

(Thompson & Eggert, 1999; van der Woerd & Cox, 2001; Ystgaard, 1997). Dropping out

of high school also has been found to have disadvantageous effects such as low self-

esteem, low expectations for success, and feelings of hopelessness (Jessor, Turbin, &

Costa, 1998). In addition, academic failure and school misbehavior were found to be

associated with poor school attitudes, and increased cigarette use during adolescence. It

was also found that the magnitude of the relationship between academic failure, school

misbehavior and increased cigarette use did not change when considering gender (Bryant,

Shulenberg, Bachman, O'Malley, & Johnston, 2000). Risk factors that were correlated

with dropping out of high school and health status were further intensified when ethnicity

was considered. Protective factors for the individual can be conceptualized as the

reciprocal of the above-mentioned risk factors, along with other factors such as

participation in school extracurricular activities and prosocial coping skills (Blechman &

Culhane, 1993; Mahoney, 2000).

Not completing high school has been associated with increased use of illicit drugs

and alcohol. In some cases, youth who have dropped out of school consume up to six

times more substances than those youth still in school (Arellano, Chavez, &

Deffenbacher, 1998; Bates, Plemons, Jumper-Thurman, & Beauvais, 1997; Guagliardo,

Huang, Hicks, & D'Angelo, 1998; Swaim & Beauvais, 1997). It has also been found that students who reported a high number of missed classes were also more likely to consume more alcohol (Swaim & Beauvais, 1997).

Factors associated with dropping out of high school on the family level have included low education for the parent, particularly the mother (Chambers et al., 1998), and high number of children per household (Figueira-McDonough, 1992). Baer (1999) found that adolescence is a notable period for the emergence of a number of problems such as delinquency, lower social competence and drops in academic performance, all of which correlate highly with the family environment. In general, the literature indicated that cohesive or highly connected families appear to provide adolescents with emotional support and security, along with decreased levels of delinquent and acting out behaviors (Berdondini & Smith, 1996; Wentzel & Feldman, 1996). Furthermore, Kager et al. (2000) defined family cohesion as the degree of emotional closeness or distance between members in the family, and ranged from disengaged (low emotional bonding, high independence between members in the family) to enmeshed (high emotional bonding, high levels of dependence, little private time). Other factors to consider are family size and family structure. Chakrabarti, Biswas, Chattopadhyay, and Saha (1998) found that as family size increased, the parent child interaction became more attenuated in terms of warmth, affection and love. Conversely, small family size was characterized by pressure for achievement, intellectuality, and dominance. Most importantly, emotional interactions with the parents were found to facilitate family cohesion more so than family size. Factors such as family cohesion or connection, and family size are critical when considering variables that correlate with health compromising behaviors such as dropping

out of high school. Glascoe (1999) suggested that participation by the parents was useful for a range of important decisions necessary in the child's education, regardless of the parents' own education level or child-rearing experience.

At the school level, attitudes of teachers and administrators, and school setting have been associated with dropping out of school. Frymier (1996) considered dropout rates in large city school districts and the problems associated with dropping out of high school. This study found that when students were at-risk for dropping out of school, teachers were less likely to be willing to spend time or effort to work with the student. Furthermore, high school principles were less interested in at-risk youth because they perceived these youth to be the cause of lower academic achievement levels, and also the ones who created discipline problems. Janosz, LeBlanc, Boulerice, and Tremblay (1997) and Ripple (1996) found that school experience variables such as school achievement, school commitment and grade retention were reliable predictors of school attendance. Kortering and Braziel (1999) found that dropouts tended to perceive the school setting as unrewarding, lacked positive experiences with their teachers, had social and academic problems in school, lacked out-of-school support, and avoided getting engaged in school activities. Jordan et al. (1996) found that school suspension was associated with early school drop out. For the youth who was suspended, they would come to see themselves as not capable of educational achievement, and the act of suspension served to substantiate that perception. In a Canadian study, MacLean and Janzen (1994) considered a framework for keeping students in school. This study reported that dropout prevention should focus on strengthening the adolescents' sense of social belonging, and enhancing the sense of academic fulfillment. MacLean and Janzen (1994) also recommended that

the school climate should be safe, friendly and orderly. In particular, the ratio of students

to teachers should be controlled, the school rules and regulations should be explicit and

consistently enforced, and policies should be student centred, involving students and

thereby increasing their decision making skills and autonomy. Battistich and Hom (1997)

and Dexheimer-Pharris, Resnick, and Blum (1997) found that perceiving school as a

community, positive feelings towards school, and enjoyment of school were protective

factors associated with a reduced sense of hopelessness and positive developmental

outcomes.

At the community level, risk factors have included characteristics such as

segregated or isolated communities, high levels of unemployment, and administrators or

teachers who have negative attitudes toward at-risk youth (Kortering & Braziel, 1999).

Ukaga, Yoder, and Etling (1998) suggested that both rural and urban groups revealed

similar trends, that it is the responsibility of caregivers, schools and the community to

enhance the likelihood of completing high school. Chandler and Lalonde, (1998) found

that Aboriginal communities in B.C. that have taken initiatives to restore their culture in

the areas of self-government, land claims, education, health, cultural facilities, and police

and fire services sustained lower rates of youth suicide. Many solutions have been

suggested at the community level, such as mentorship programs, or 'comprehensive

community initiatives' which would include a collaborative partnership between citizens,

primary institutions, service providers and public officials in promoting the health and

well-being of adolescents and their families (Barton et al., 1997; Blechman, 1992).

Review of risk and protective factors on the individual, family, school and community

levels associated with dropping out of school is a necessary step to understanding the links between overall health status and education issues.

Watkins et al. (1994) considered factors for adolescents at risk of grade retention, absenteeism, and overall global risk. In this study, a list of 45 factors associated with youth at-risk for dropping out of school was compiled. These 45 factors incorporated variables on the individual, school and family level. Some of these factors included: attempted suicide in the past year, used drugs or engaged in substance abuse, had been a drug 'pusher' during the past year, was involved in a pregnancy in the past year, was arrested for illegal activity, consumes alcohol regularly, parents have a negative attitude toward education, has several siblings who have dropped out, was sexually or physically abused in the last year, failed two courses last school year, was suspended from school twice last year, parents drink excessively and is an alcoholic, was retained in school one year, was arrested for driving while intoxicated, mother did not graduate from high school, and other school and family factors.

Many of the above mentioned factors relating to school drop out on the individual, school, family or community levels are compounded when ethnicity is considered. Some studies have shown that Aboriginal and other minority youth show elevated risk for dropping out of high school, and as a result, may have lower levels of emotional health contributing to higher depression and suicide rates, than main stream youth (Ripple, 1996). In addition, Aboriginal youth have been found to be more likely to engage in risky behaviours, such as substance use and delinquency (Cummins et al., 1999; Tonkin et al., 2000). In the United States, it has been found that Native Americans have the lowest level of educational achievement, and have the highest rate of

unemployment (Ramasamy, 1996). Native American youth are also at the greatest risk for dropping out of school, above African American and other ethnic minority students (Moore, 1994). Other factors such as living in single parent families, physical or sexual abuse, economic conditions, and geographic isolation also may have been an influence on health status.

Despite the research findings that Aboriginal youth have high levels of engagement in risky behaviors and low levels of emotional health, Aboriginal youth who attend school are, for the most part, doing well. These Aboriginal youth in school rated their physical health as good or excellent, had high educational aspirations, and had high levels of connection to both school and family (Tonkin et al., 2000). Thus, attendance in school may be a protective factor when considering overall health of Aboriginal youth. Furthermore, higher levels of connection to school and family may associated with decreased delinquent behavior and increased well-being for the youth.

In general, connectedness is an expression used to describe how adolescents feel about their social surroundings. Connectedness implies a sense of attachment to other people, such that they can be considered as a resource which can be relied upon in times of stress or in reaction to difficult experiences or decisions (Tonkin et al., 1999). More specifically, school connectedness refers to how adolescents feel about going to school, whereas family connectedness refers to how adolescents feel about their family relationship. Lower levels of school and family connectedness scores have been correlated with other health compromising behaviors such as drug and alcohol abuse, risky sexual behavior, physical and sexual abuse, suicide, emotional distress, bullying, involvement in physical fights, truancy, and lower education expectations (Jacobson &

Rowe, 1999; Neumark-Sztainer, Story, French, & Resnick, 1997; Pesa, Syre, & Jones, 2000; Taylor-Seehafer & Rew, 2000; Tonkin et al., 1999). Conversely, higher levels of school and connectedness scores have been correlated with health promoting behaviors such as good emotional and physical health, increased extracurricular activities, and positive body image, (Jacobson & Rowe, 1999; Pesa et al., 2000). Finally, it was found that "young people who reported good family relationships were also less likely to use alcohol and marijuana (Waldram, Herring & Young, 1995, p.93).

The School Connectedness Scale (SCS) and the Family Connectedness Scale (FCS) were developed for adolescent populations currently attending high school. These scales were developed by a group of public health and nurse researchers in the Division of Epidemiology, School of Public Health, in the University of Minnesota (Jacobson and Rowe, 1999). The SCS and FCS have been used as a subscale in Adolescent Health Surveys, and have been administered to more than a quarter of a million adolescents throughout the United States and British Columbia. Item reliability scores for the SCS and FCS have been reported to be over .70, which is an acceptable level.

The construct validity of the theory behind the SCS and FCS was assessed, beginning with a theory (Streiner & Norman, 1989). In this case, one could assert that higher levels of school and family connectedness were protective factors for adolescents attending school. Second, the empirical relationship between the two concepts needs to be examined. In this case, specific predictions need to be made such as whether the student has low connections to school and family, they would be inclined to engage in health compromising behaviors. Finally, the empirical evidence needs to be interpreted. One would assert that their theory is supported or not supported by the empirical

evidence (Streiner & Norman, 1989). In this case, one would observe the levels of school and family connectedness reported by the adolescents correlated this with the health promoting or compromising behaviors to determine whether their assertions were supported, and what this means. The higher the correlations between the construct of school or family connectedness with certain behaviors, the more confidence one has that their scale is a good measure (Streiner & Norman, 1989). Establishing construct validity for the SCS and FCS is an on-going process.

In 1992, and again in 1998, The McCreary Centre Society administered the Adolescent Health Survey (AHS) to students throughout B.C. The AHS was designed to assess factors that related to adolescent health. In 1998, nearly 26,000 youth from 59 school districts participated in the AHS, including over 1,700 youth who identified themselves as Aboriginal. The McCreary Centre Society's landmark study entitled *Raven's Children* indicated that Aboriginal youth in B.C. report to have surprisingly and encouragingly excellent health and similar levels of emotional health than non-Aboriginal youth (Tonkin et al., 2000). However, one of the major limitations of the *Raven's Children* is that the surveys were obtained only from youth who were in school at the time. More critically, Aboriginal youth who dropped out, or were ill or skipped classes on the day of administration were not included in this study. Yet, it is very likely that these youths who dropped out or were absent would have a different health profile than the above norm for Aboriginal youth. The relationship between dropping out of school and factors such as connection to school and family, engagement in risky behaviors, and health and well-being will be explored in this research project.

This study involved exploring data from an adapted version of the survey utilized in *Raven's Children* collected from Aboriginal youth in Alert Bay, B.C. Alert Bay is home to the Namgis, one of the 15 tribes of the Kwakwaka'wakw people. Alert Bay is situated on Cormorant Island off the coast of Northern Vancouver Island. The research questions were as follows:

1. What are the demographic and family backgrounds, attitudes toward school, health and well-being status, substance use, and sexual behavior for these First Nations youth, and do they relate to school attendance?

    a. How does this data compare to other samples of First Nations youth?

2. Are school and family connectedness associated with delinquent behaviors and health and well-being for First Nations youth?

    a. Are higher levels of school connectedness associated with lower levels of engagement in delinquent behaviors?

    b. Are higher levels of family connectedness associated with lower levels of engagement in delinquent behaviors?

    c. Are higher levels of school connectedness associated with higher levels of health and well-being?

    d. Are higher levels of family connectedness associated with higher levels of health and well-being?

3. Is school attendance associated with delinquency and health and well-being for First Nations youth?

    a. Is school attendance associated with lower levels of delinquency?

    b. Is school attendance associated with higher levels of health and well-

being?

4. What is the relationship between pregnancy/parenthood and school attendance,

school variables, suicidal behavior, peer relationships, substance use, and sexual

behavior?

5. Why do these First Nations youth in Alert Bay drop out of high school?

6. How was the decision made to drop out for these First Nations youth?

7. What do these First Nations youth recommend the school system change in order

increase completion rates?

<div align="center">Method</div>

<u>Participants</u>

Participants were youth on the First Nations Population Band Lists in Alert Bay. The Alert Bay First Nation's population includes Namgis people, Whe-La-La-U people, and First Nations people from Kingcome Inlet and Guilford Island. Cormorant Island is divided in half, with half of the island being Reserve Land for First Nations people. The Namgis membership is also about 1500 people, with half of the members living in Alert Bay, the other half residing off-reserve. It was estimated that 350 youth under the age of 25 currently reside in Alert Bay.

Alert Bay was once called "Yalis," meaning "A safe haven," and was used as a winter village site by the Namgis people. Alert Bay was also a used as a stop-over place between Islands, and also used for potlatching and feasts (Svanvik, 1999). Alert Bay was once a thriving fishing village, and is home to the world's largest totem pole.

Alert Bay has a residential school history, dating as far back as 1890. At that time, the Department of Indian Affairs had first approved funding to build an industrial school for boys, and soon after approved funding for a girls boarding school (Bohni-Nielsen, 2001). In the early days, local Namgis youth attended the school, but the school also attracted families from other communities who came to Alert Bay to pursue medical care, work and education. By the mid-1920's, the Department of Indian Affairs approved the development of St. Michael's school, run by the Anglican Church. Over an eighty year period (1894-1974), approximately 1,800 Kwakiutl youth attended the residential school in Alert Bay (Bohni-Nielsen, 2001). By the 1940's, St. Michael's residential school was considered to be in shambles because of insufficient funding, unqualified staff or no staff, incompetent management, and serious disciplinary troubles. Over the next decade, it was recommended that St. Michael's school be stripped of its educational function and serve as a residence rather than a school. By 1965, and integrationist policy from the Department of Indian Affairs mandated that both Native and non-Native youth attend the same schools. By 1974, St. Michael's school was shut down. (Bohni-Nielsen, 2001).

Alert Bay has taken the initiatives outlined by Chandler and Lalonde (1998) such as: obtaining self-government, currently negotiating land treaty claims, taking control of health services and education (the T'lisala'gilakw School), and has cultural facilities (the U'Mista Cultural Centre), police and fire services. The T'lisala'gilakw School was formed in 1976, two years after the closure of St. Michaels, and was named "after the mink, a trickster figure in Kwakiutl mythology" (Bohni-Nielsen, 2001, p. 310). The T'lisala'gilakw School teaches classes from Nursery School to Grade 8, and students can take grade 9 to 12 curriculum by correspondence. Otherwise, to attend grade 9 through 12

classes, the youth must leave Alert Bay on the 7:00 AM ferry to Port Mc Neil High

School. On average, 30 students enter grade 8 every year, and on average, 5 to 6 of these

youth graduate from Grade 12. It has been found that Mondays and Fridays are

particularly bad days for attendance and attention in class. On an average day, the

attendance in school is about 60-70%.

At one time, Alert Bay was a thriving commercial fishing and forestry

community. Over the years, there have been severe limitations imposed on commercial

fishing and forestry rights for many Aboriginal communities. Consequently,

unemployment rates are very high in Alert Bay, over 60%, compared to a 7% rate

nationally (Namgis First Nations Regular Meeting of Council, 1999). As a result, many

First Nations people have little expectation that they will obtain employment on the

island. Most of the First Nations people employed on the island work for the Namgis

Band Council Administration. Many people have moved off the island for various

reasons: for employment, for education, for health services, or to be with family. Alert

Bay does have a Namgis Youth Employment Program with a mandate to enhance

training and employment opportunities for unemployed youth. This is a 9 month

program, and youth apply for entrance into the program. Youth who have dropped may

only gain admittance into the program once they have been out of school for one year.

With respect to sampling, in order to maximize power, the probability of rejecting

the null hypothesis, the ideal sampling situation would include equal sample sizes. In this

study, the number of youth in-school/graduated was 82, while the number of youth who

dropped out was 49. To deal with unequal sample sizes, the harmonic mean was

calculated, which was subsequently used to calculate the non-centrality parameter, or the

effective sample size. In other words, by using unequal sample sizes, it took 131

participants to obtain the same power level that 122.68 participants would have yielded,

had there been equal sample sizes (Howell, 1997). This effective sample size was then

used to calculate power for this study. In this case, with a non-centrality parameter of

1.66, and a medium effect size, power at the .05 significance level was calculated to

conduct chi-square analysis and independent sample t-test to be .40. It should be noted

that to conduct Regression analysis, power at the .05 significance level was .17, or, a 17%

chance of rejecting the null hypothesis (Cohen, 1992).

Instrument

Aboriginal youth were sent a letter inviting them to participate in a 127-item

Adolescent Youth Health Survey (AYHS) pencil and paper survey. The AYHS included

116 closed ended questions, and 11 open ended questions. The AYHS was adapted from

the Adolescent Health Survey 1998, and the Youth Health Survey – Street Youth 2000,

developed by The McCreary Centre Society. The McCreary Centre Society is a non-

profit organization committed to improving the health of B.C. youth through research,

information and community-based participation projects. In total, 57 questions were

taken from the Adolescent Heath Survey 1998, 23 questions from the Youth Health

Survey – Street Youth 2000, and 47 questions were developed for this study based on the

literature.

The AYHS included demographic information, questions about peers, family

background, connection to school and family, attitudes toward school, physical health

status, illness and disabilities, emotional health, suicide risk, help-seeking behavior,

sexual activity experience of abuse or violence, drugs, alcohol and tobacco use,

involvement in physical fights, weapon carrying, and criminal charges or convictions.

Questions specifically for those youth who have dropped out focused on the decision

making process to drop out, what reasons the youth gave for dropping out of school, what

are they doing with their time now that they have dropped out (are they employed, are

they on welfare or any other government assistance, are they experiencing trouble with

the law), what they feel the school system might have done differently to keep them in

school, and are they one day considering going back to school to get their diploma.

The AYHS included a delinquency construct, health and well-being items, and

school and family connectedness constructs. The delinquency construct (see Appendix A)

was comprised eight items including charged of or convicted of a crime, expelled or

suspended from school, use of other illicit drugs, self-reported addiction to alcohol or

marijuana, weapon carrying and involvement in physical fights. These eight items were

recoded to dichotomous responses (yes/no) then summed for a possible score between

zero and eight.

Health and well-being items (see Appendix B) consisted of self-reported physical

health, body image, emotional distress, suicidality, and discrimination. Physical health

was a one-item self-rated measure describing their health status. There were two items

intended to assess body image: perception of body weight, and a self-rated scale of

satisfaction with their body with the response options ranging from 1 "not at all

satisfied," to 7 "very satisfied." The emotional distress measure was taken from the

Adolescent Health survey and was a composite of five items assessing emotional distress

in the past 30 days. The emotional distress measure was an additive scale and participants

obtained a score between five (low or no emotional distress) and 25 (high levels of

emotional distress). There were three items on suicidality during the past 12 months, whether the participant seriously considered attempting suicide, whether they made a plan to attempt suicide, and whether they actually attempted suicide. Finally, the AYHS included a question on experiencing discrimination in the past 12 months. Each individual item was assessed.

The SCS (see Appendix C) was developed as a 7-item scale measuring how students feel about their school environment, but was expanded to be a 9-item scale. The FCS (see Appendix D) was developed as a 9-item scale measuring the degree of emotional distance or closeness between family members, and was expanded to be an 11-item scale. The Namgis school administration and Band Council requested two items be added to each scale. Related to school, they were interested in whether the youth perceived that their teachers or school gave the impression that education is important, and that the teachers or school gave the impression that they wanted the youth to succeed in school. Related to family, they were interested in knowing whether the youth felt like they spent enough quality time with their parents (having dinner together, talking, doing homework together), and whether the youth felt that the parents paid attention to them. It was the impression of the school administrator and Band Council that many parents in the community spend a great deal of time playing bingo, thereby taking away from possible family time. The SCS and FCS were additive scales, and participants obtained scores between ten and 48, and between 12 and 70 respectively.

The association between dropping out of school and the delinquency construct and health and well-being was assessed. More specifically, whether higher levels of school or family connectedness were associated with lower levels of delinquency, and

whether higher levels of school or family connectedness were associated with higher

health and well-being.

Design

This study was a between-groups design, the two groups consisted of those who

were either currently attending or have completed high school (in-school/graduated), and

those who had dropped out of school (dropped out). Comparisons were made between

these two groups on the following measures: delinquency, health/well-being, school

connectedness and family connectedness.

Procedure

A meeting was held in Alert Bay between me, the Namgis Band Council, the

School and Health Boards, the School Principal, and Youth Program Coordinators to

review this study. The project was introduced to the meeting participants and time was

spent outlining specific concerns by the community regarding the Aboriginal youth who

had dropped out of school. The "Aboriginal Youth Health Survey Information and

Invitation" letter was then reviewed, along with the parent/guardian and youth informed

consent forms. The Aboriginal Youth Health Survey was then reviewed for readability

and content. Many suggestions were offered, including the addition and removal of

questions. The method of participant recruitment, location of data collection, the

ethnographic component, and remuneration were also reviewed. The meeting concluded

with the signing of the "Namgis First Nation Guidelines for Visiting Researchers/Access

to Information Contract" between me and the community (see Appendix E). This contract

outlines 'rules of conduct,' and includes "ethical guidelines for research with human

subjects adopted March 1979 by the Social Sciences and Humanities Research Council of

Canada (SSHRC) re: individual and collective rights" (Namgis First Nations, 2002).

Finally, the Band Council drafted a letter of approval for the study. The procedure will be

outlined below.

All youth in Alert Bay between the age of 12 and 25 were mailed an Information

and Invitation Letter, inviting them to participate in this study. The Information and

Invitation letter included: an introduction to the investigator, a description of the study,

survey topics, objective of the study, approximate time needed for participation,

remuneration amount, the need for parent/guardian consent for youth between the age of

12 to 17, and the time and place to participate. A parent/guardian informed consent form

was included with the Information letter. Potential participants were advised that

completing the survey would take approximately one hour of their time, and that they

were compensated $10.00. Furthermore, they were advised that the information they give

is completely anonymous and not for use by any outside organization. It was anticipated

that the remuneration which was given to all the youth would be a sufficient financial

incentive, thereby reducing a self-selection bias.

Aboriginal youth were invited to participate in this study at the Namgis

Community Recreation Centre. Youth were advised in advance that a maximum of five

youth may participate at a time. Upon arrival, and where possible, youth were asked for

identification indicating their year of birth. Those youth between 12 and 17 years old

were asked to produce their signed parent/guardian informed consent form. Youth

between 18 and 25 years old were asked to sign a Youth Informed Consent form. If more

than two youth were participating at the same time, they were requested not to talk to

each other for the duration of completing the survey. Youth were then given the AYHS to

complete. In addition to reading their rights on the consent forms, youth were advised verbally that they could withdraw their participation at any time, and that the information they gave was completely anonymous.

Upon completion of the AYHS, participants were asked to sign a receipt indicating payment of the $10.00 remuneration. Participants were also asked whether they would be interested in being involved in any potential subsequent interviews or focus groups that occur as a result of this study. If they were interested, they were asked to give their name and contact information on the bottom of the receipt. The participants were thanked for their involvement, and were fully debriefed.

Results

Research Question 1

About the Sample

In total, 131 First Nations youth (female = 55%, male = 45%) participated in the AYHS. The age range was between 12 and 25 years old. The average age of the female participants was $M = 18.07$, $SD = 3.38$, and the average age of the male participants was $M = 17.27$, $SD = 3.77$. In total, 98% of the youth identified themselves as Aboriginal or having First Nations status. In total, 64% of the youth have lived on First Nations reserve land for most or all of their life. When asked who the youth currently live with, 35% indicated that they live with two parents, while 23% indicated that they live with one parent, mother or father, at different times. Of the youth who participated, 15% reported that they had been legally adopted. In total, 13% of the youth have been "in-care" of the government, in either a foster home or group home. When possible, comparative data will

be presented from other First Nation youth samples from B.C., such as The McCreary

Centre Society AHS data[2] (1998), and Ministry of Education data (2001).

Family

Table 1
Highest Level of Education Completed by Parents

Education level	Mother AYHS	Mother AHS (1998)	Father AYHS	Father AHS (1998)
	no. (%)	no. (%)	no. (%)	no. (%)
Did not finish high school	65 (49.6)	378 (22.5)	74 (56.5)	430 (25.7)
Finished high school	22 (16.8)	362 (21.5)	22 (16.8)	275 (16.4)
Vocational training (trade school)	3 (2.3)	45 (2.7)	2 (1.5)	99 (5.9)
Took some college or University courses	20 (15.3)	294 (17.5)	8 (6.1)	158 (9.4)
Finished college or University	12 (9.2)	311 (18.5)	4 (3.1)	221 (13.2)
Don't know	9 (6.9)	291 (17.3)	21 (16.0)	492 (29.4)

The AYHS included questions on family background. When asked about their

parents' employment status, 38% reported that their fathers worked full-time, while 56%

of their mothers worked full-time. Participants were also asked to report the highest level

---

[2] AHS Data presented in The McCreary Centre publications, such as *Raven's Children,* were weighted for the purpose of making generalizations about Aboriginal youth who participated in the survey, and representing school districts in the province of B.C. For the purpose of this study, data presented from the AHS will not be weighted. Consequently, some figures may appear slightly different than those in McCreary Centre Society publications. It is my intention to compare the two samples rather than make inferences about the population of Aboriginal youth.

of education completed by their mother or father (see Table 1). In total, 57% of fathers

and 50% of mother's did not complete their high school education. This is compared to

the AHS data where 26% of fathers and 22% of mothers did not complete their high

school education.

Participants were asked to complete the 13-item FCS. In this study, Cronbach's

alpha was used to assess item reliability (.81), an acceptable level. There existed no

significant differences in level of family connectedness between male and female

participants, and between participants who dropped out and those in-school/graduated.

The AYHS also included two open-ended questions after the FCS, "Please tell me who

you thought of as family when you answered the above questions: when you talked about

mother/father, you thought of." These questions were included to determine whether the

participants were thinking of their biological parents, extended family, or friends. When

thinking of "mother," 53% of the participants reported that they were thinking of their

biological mother, 7% were thinking of their aunt or grandmother; some participants

reported thinking of "happiness," "caring," "anger," or "security", when thinking of their

mother. When thinking of "father," most participants reported thinking of their biological

father, 7% were thinking of their uncle or grandfather; some participants reported

thinking of "caring," "hate," "I wish he would come around more often," "respect,"

"sadness," "soccer boots," and "sharing time with each other."

School

Participation was evenly distributed between Grade 7 and Grade 12 (see Table 2).

In total, 64% of the participants attended the Head Start or Nursery program. When asked

whether they had failed a course in the last year, 38% reported that they had. Of those

who had failed a course, 36% reported that they had failed one course, and 30% reported

that they had failed two courses. At the provincial level, Aboriginal students experienced

grade retention at every grade level, at a higher proportion than non-Aboriginal students

(Ministry of Education, 2001). When asked what kind of student the participant is in

terms of school work, 11% reported that they were above average, 75% reported that they

were average, and 14% reported that they were below average. In total, 51% of the

Aboriginal participants in the AHS reported that they were above average students.

Table 2
What Grade are you in?

Grade	All	Male	Female
	no. (%)	no. (%)	no. (%)
7	10 (7.6)	9 (15.3)	1 (1.4)
8	9 (6.9)	4 (6.8)	5 (6.9)
9	10 (7.6)	3 (5.1)	7 (9.7)
10	12 (9.2)	5 (8.5)	7 (9.7)
11	22 (16.8)	12 (20.3)	10 (13.9)
12	9 (6.9)	2 (3.4)	7 (9.7)
Graduated from High School	10 (7.6)	5 (8.5)	5 (6.9)
Dropped out of High School	49 (37.4)	19 (32.2)	30 (41.7)

Participants were asked to complete the 11-item SCS. Item reliability was assessed using Cronbach's alpha and was found to be an acceptable level (.73). Not surprisingly, participants who were in-school/graduated reported higher levels of school connectedness than those who dropped out of school, $t = 2.089$, $p < .05$. Participants were also asked whether they ever considered dropping out of school, of which 50% reported that they had considered dropping out. When asked about the likelihood that they would finish high school, 33% were 100% sure that they would complete high school (see Figure 1). In total, 64% have had a sibling drop out.

Figure 1
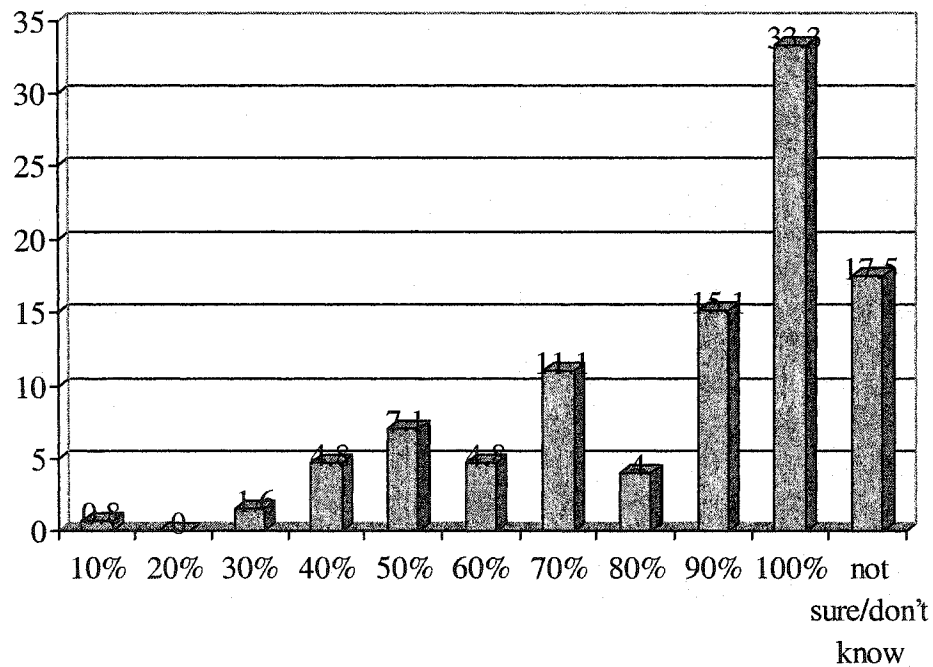
Figure 1 What is the likelihood that you will finish school?

Health and Well-being

Participants were requested to describe their current physical health status (see Table 3). In total, 83% reported excellent or good physical health, similar to the AHS

data. Furthermore, when asked "how do you think of your body," 65% reported that they were about the right weight. Participants were also asked "how satisfied they are with how your body looks," The average participants for male participants was $\underline{M}$ = 5.24, $\underline{SD}$ = 1.43; and the average for female participants was $\underline{M}$ = 4.28, $\underline{SD}$ = 1.57. Male participants reported to be significantly more satisfied with how their bodies looked, t = 3.56, p < .001.

Table 3
Health and Well-being variables

Variable	no. (%)
Current physical health status	
Excellent	22 (17)
Good	85 (66)
Fair	17 (13)
Poor	5 (4)
How do you think of your body	
Underweight	11 (9)
About the right weight	84 (65)
Overweight	35 (27)

The AYHS included a 5-item scale to assess emotional health (see Appendix B). Item reliability was assessed using Cronbach's Alpha (.79), an acceptable level. Overall, the average score for all participants was M = 12.26, SD = 2.64. Participants were asked to respond to questions about suicide. In total, 85% of these participants knew someone who actually killed, or tried to kill themselves; this is compared to 67% of Aboriginal youth who participated in the AHS (see Figure 2). Of those who considered suicide or

attempted suicide, the most frequently reported reasons were being lonely or depressed

(see Table 4). The AYHS also included questions on discrimination. Overall, the greatest

percentage (31%) of participants reported experiencing discrimination due to race or skin

color (see Figure 3). Aboriginal participants in the AHS also reported discrimination due

to race or skin color was the most frequently experienced (17%).

Figure 2
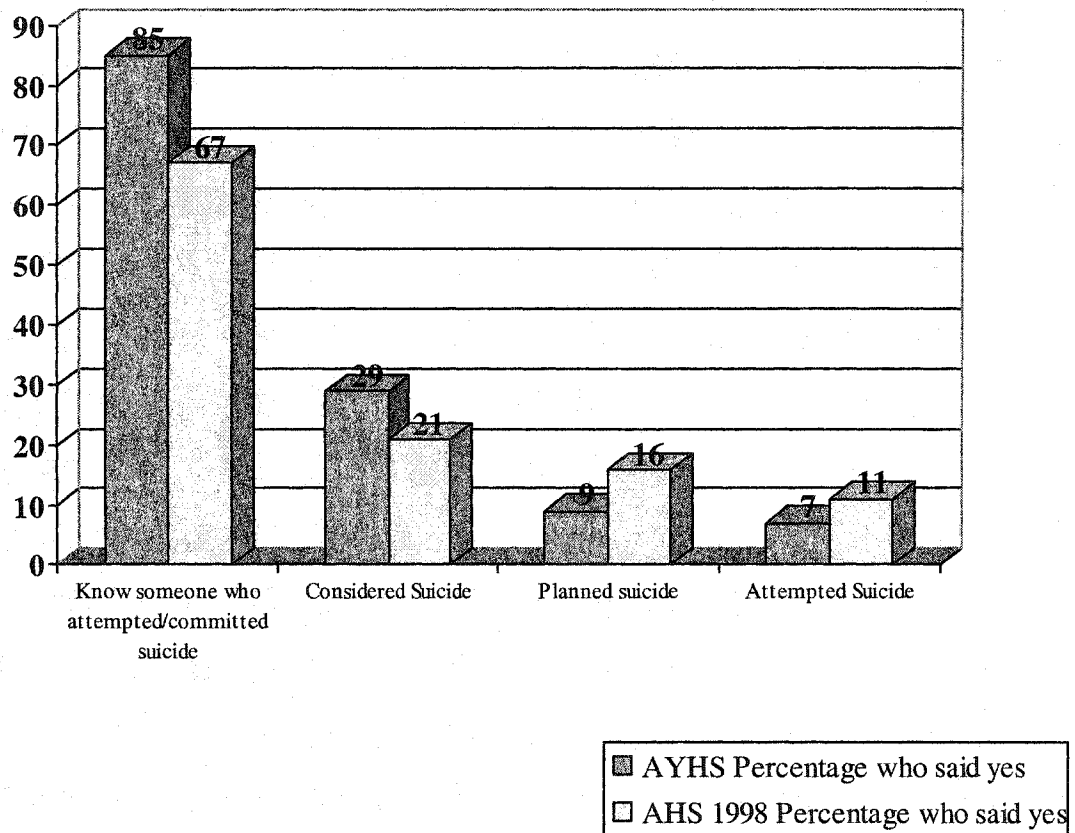
Figure 2 Suicide – All participants' from the Aboriginal Youth Health Survey and the
Aboriginal participants from the Adolescent Health Survey 1998: responses for knowing
someone who attempted or committed suicide, whether the participant considered
suicide, whether the participant planned a suicide attempt, and whether the participant
actually attempted suicide

Table 4
Which of the following led you to make your last
suicide attempt (mark all that apply)

Experience	All participants
	no. (%)
No place to live	3 (2.3)
Lack of money	7 (5.5)
Loss of job	2 (1.6)
Feeling lonely or depressed	14 (10.9)
To get attention	4 (3.1)
Concern about HIV/AIDS	2 (1.6)
Broke up with boy/girlfriend	9 (7.0)
Problems with drugs/alcohol	3 (2.3)
Sexual orientation	1 (.8)
Problems with family	13 (10.2)
Physical or sexual abuse	3 (2.3)
Death of family member/family	11 (8.6)

Figure 3
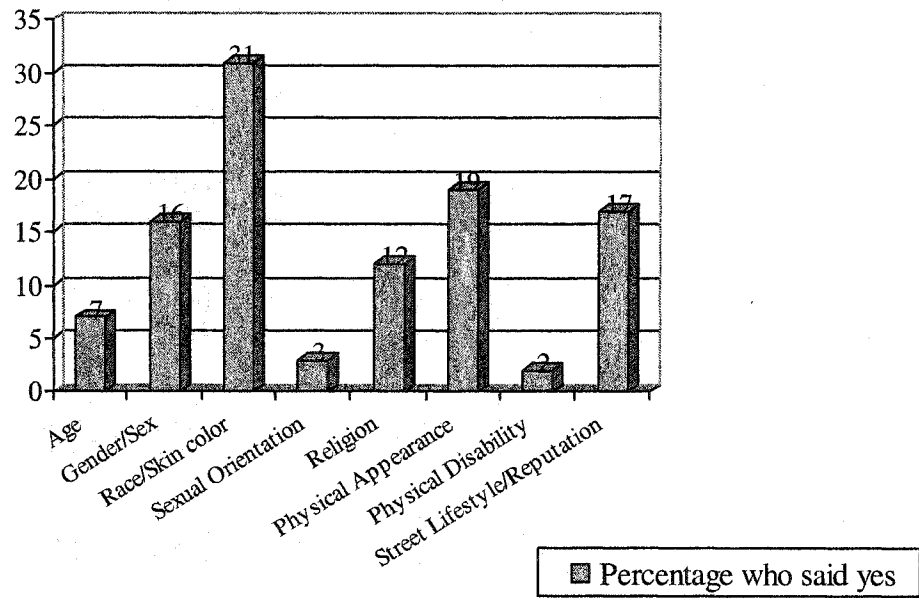
Figure 3 – Ever experience Discrimination for: age, gender/sex, race/skin color, sexual orientation, religion, physical appearance, physical disability, street lifestyle/reputation.

<u>Delinquency</u>

Table 5
<u>Have you ever tried the following illegal substances</u>

Drug	All	Male	Female
	<u>no. (%)</u>	<u>no. (%)</u>	<u>no. (%)</u>
Cocaine	50 (38.8)	24 (41.4)	26 (36.6)
Hallucinogens	53 (40.8)	24 (40.7)	29 (40.8)
Mushrooms	65 (50.4)	34 (58.6)	31 (43.7)
Inhalants	9 (6.9)	6 (10.2)	3 (4.2)
Amphetamines	14 (10.9)	3 (5.3)	11 (15.5)
Heroin	7 (5.4)	4 (6.8)	3 (4.2)
Injected illegal drugs	3 (2.3)	2 (3.4)	1 (1.4)
Steroids	5 (3.8)	4 (6.8)	1 (1.4)
Prescription Pills	29 (22.5)	9 (15.3)	20 (28.2)

In total, 25% of this sample have been charged with or convicted with one or more crimes, with the most frequently reported crime being assault (10%). Participants were asked whether they had been expelled or suspended from school in the past 12 months. In total, 12% had been expelled, and 20% had been suspended from school. When the participants were asked to identify the reasons why they were ever suspended or expelled, the most frequent response was for threatening another student. Participants were asked to report the frequency that they had ever tried illegal substances (see Table 5). Participants were then asked to indicate whether they thought they were addicted to substances. In total, 25% felt that they were addicted to alcohol, and 25% felt that they were addicted to marijuana. In total, 6% of the participants reported that they had carried a weapon, such as a gun, knife or club in the past 30 days. When asked whether the

participants had been involved in a physical fight during the past 12 months, 35%

reported that they had.

The above eight delinquency items were recoded into dichotomous yes/no

responses and then summed for a possible score between zero and eight. Item reliability

was assessed using Cronbach's Alpha and was found to be below an acceptable level

(.38). The overall average score was $\underline{M}$ = 3.63, $\underline{SD}$ = 1.42. There were no significant

differences between male and female participants on the individual delinquency items, or

the summed delinquency construct.

Substance use

In total, 92% of the participants have tried marijuana at least one time in their life,

compared to 60% of Aboriginal youth who participated in the AHS. Participants in the

AYHS were asked to report the age that they first tried marijuana; the age range was

between seven and 18 years old, with the modal age being 13. When asked whether the

participant had ever had a drink of alcohol, 94% reported that they had. In comparison,

73% of Aboriginal youth in the AHS reported having a drink of alcohol. Participants in

the AYHS were asked to report the age that they first tried alcohol, and the age range was

between two and 20 years old, with the modal age being 13.

Sexual Behavior

In total, 72% of the participants have had a sexual relationship, defined in the

AYHS to have "gone all the way, oral sex or mutual masturbation." In comparison, 39%

of Aboriginal youth who participated in the AHS reported that they had had a sexual

relationship. The average age of the AYHS participants' first sexual relationship was $\underline{M}$ =

14.12, $\underline{SD}$ = 2.3, with the range being between three and 22 years old. Participants were

asked whether they had ever been forced or coerced to have sexual intercourse. In total, 15% of the participants had been forced or coerced to have sex. In comparison, 29% of Aboriginal youth who participated in the AHS reported that they had been forced or coerced to have sex. When asked whether they had ever been sexually abused, 25% of all participants reported that they had been sexually abused. Chi-square analysis was conducted to determine whether male or female participants were more likely to have been sexually abuse, the results were not significant.

Participants who dropped out of high school

In total, 49 (37%) of the participants in this sample dropped out of high school. The average age of those youth who were still in school or had graduated was $\underline{M} = 15.9$, $\underline{SD} = 2.66$, and the average age of those youth who dropped out was $M = 20.73$, $\underline{SD} = 2.78$. Participants who dropped out of school were significantly older than those youth in-school or graduated, $t = 9.91$, $p < .001$ (see Figure 4). Participants who dropped out of school reported most frequently that they dropped out in Grade 11 (see Figure 5). At the time of participation, the length of time since dropping out of high school and their current age ranged from 1 month to 11 years. The average time in years since the participants dropped out and their current age was $\underline{M} = 5.45$, $\underline{SD} = 2.48$. Chi-square analysis was conducted to determine whether youth who dropped out were more likely than youth in-school or graduated to have been suspended or expelled from school, or fail a course in the past 12 months, the results were not significant. Finally, youth who dropped out of school reported lower levels of school connectedness than those who were in-school/graduated, $t = 2.09$, $p < .05$.

Figure 4
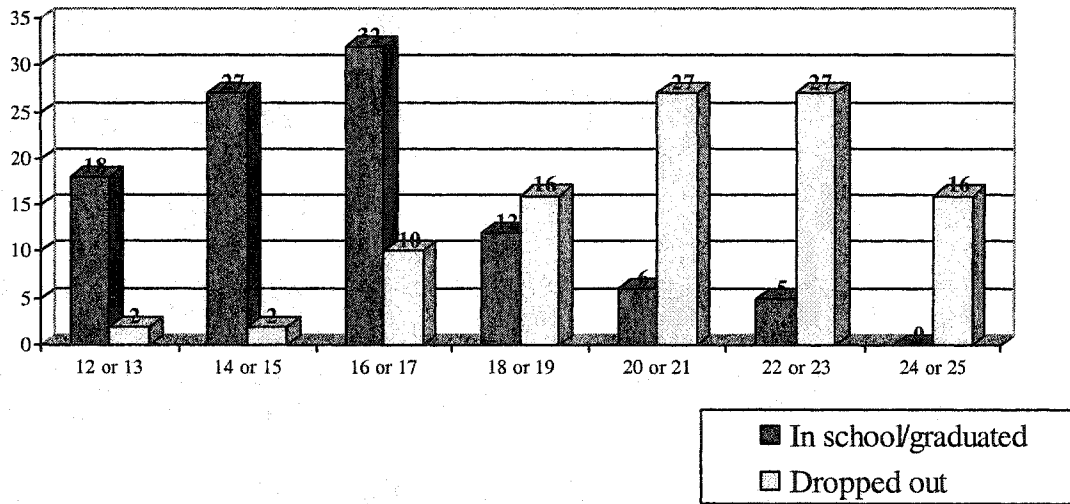
Figure 4 – Age of participants by In-school/graduated and Dropped out of school (percentages within each group)

Figure 5
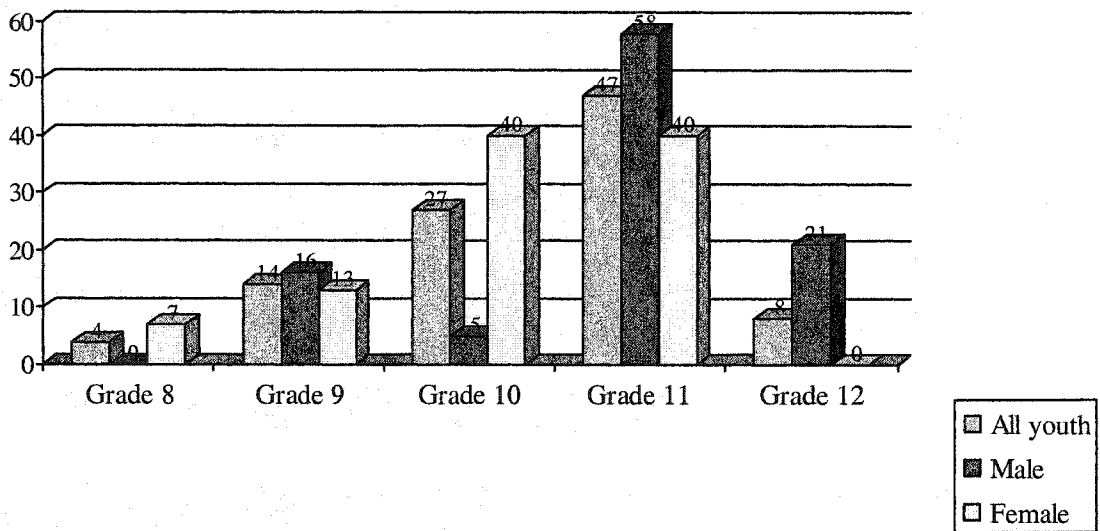
Figure 5 What grade did you drop out of school?

Participants who dropped out of school and those in-school/graduated shared

many similarities (see Table 6) and differences (see Table 7). For example, participants

Table 6

<u>Similarities between participants who dropped out of school</u>
<u>and those in-school/graduated</u>

Variable	Dropout	In-School/ Graduated	χ^2
	<u>no. (%)</u>	<u>no. (%)</u>	
Ever charged or convicted of a crime	16 (32.7)	17 (21.0)	2.194
Attend Head Start or Nursery Program	30 (61.2)	52 (65.0)	1.234
Expelled from school	5 (10.6)	10 (12.5)	.099
Suspended from school	7 (14.9)	18 (22.8)	1.154
Fail a course in the last year	18 (37.5)	31 (38.3)	.008
Have a sibling drop out of school	35 (72.9)	19 (52.8)	3.634
Rejected by friend from school	20 (40.8)	25 (31.3)	1.703
Considered suicide	16 (33.3)	22 (26.8)	.619
Discrimination due to race/skin color	11 (22.9)	29 (35.4)	2.203

Table 7

<u>Differences between participants who dropped out of school</u>
<u>and those in-school/graduated</u>

Variable	Dropout	In-School/ Graduated	χ^2
	<u>no. (%)</u>	<u>no. (%)</u>	
Have friends who dropped out	49 (100.0)	60 (67.6)	14.498***
Have friends who work for a living	42 (85.7)	45 (56.3)	12.014***
Aspirations for post-secondary education	7 (25.0)	45 (62.5)	11.358***
Mother did not finish high school	31 (68.9)	34 (44.2)	6.981**
Father did not finish high school	33 (80.5)	41 (59.4)	5.185*
Addicted to alcohol	18 (36.7)	14 (17.3)	6.225*
Addicted to marijuana	21 (42.9)	12 (14.8)	12.676***
Ever have a sexual relationship	44 (89.8)	50 (61.0)	12.570***
Forced/coerced to have sexual intercourse	14 (29.2)	5 (6.3)	12.240***
Witness someone being abused or mistreated	34 (70.8)	42 (51.9)	4.486*
Ever been physically abused or mistreated	28 (59.6)	31 (38.3)	5.432*
Ever been sexually abused	19 (39.6)	13 (16.0)	8.949**
Involved in a physical fight	9 (18.8)	36 (43.9)	8.463**

* $p < .05$
** $p < .01$
*** $p < .001$

who dropped out were equally likely as participants in-school/graduated to have been suspended or expelled from school, and to have ever been charged or convicted of a crime. Conversely, youth who dropped out of school were more likely than youth in-school/graduated to have mothers and fathers with less than a high school education, and have friends who also dropped out of school.

In total, 51% of those who dropped out reported that they are currently on government assistance; 12% reported that they are having trouble with the law; 25% reported that they are taking courses in trade or alternative schools; and 86% indicated that they are thinking about going back to school to get their diploma or GED. When asked how the school system contributed to their dropping out, participants made comments like: "bad programs and teachers," "had to take a 45 minute ferry," "it got frustrating," "kicking me out," "no helping," and "no intervention from bullying."

<u>Research Question 2</u>

Pearson's Product Moment Correlations (PPMC) were calculated for the school and family connectedness scales and the delinquency construct. It was found that that higher levels of school connectedness was associated with lower levels of delinquency, or, that school connectedness and delinquency were significantly negatively correlated, r = -.34, $p < .001$. It was also found that higher levels of connection to family were not associated with lower levels of delinquency.

PPMC and independent samples t-tests were utilized to determine the relationship between school and family connectedness and the 15 items involved in assessing the health and well-being of the participants. The two 15 test families were analyzed using the stepwise Bonferroni procedure for multiple comparisons.

Table 8
Mean school connectedness scores associated with suicide and discrimination

Variable	Yes			No		
	M	SD	n	M	SD	n
Suicide:						
Considered suicide attempt	30.37	6.19	35	31.60	4.75	88
Plan a suicide attempt **	26.55	6.52	11	31.71	4.85	112
Attempted suicide	27.38	7.50	8	31.52	4.94	115
Discrimination due to:						
Age	27.75	2.77	8	31.62	5.22	115
Gender/sex	29.11	3.90	19	31.78	5.29	104
Race/skin color	30.84	4.58	38	31.60	5.43	85
Sexual orientation	28.33	.58	3	31.44	5.22	120
Religion	29.50	4.80	12	31.57	5.19	111
Physical appearance	29.23	5.23	22	31.83	5.07	101
Mental/physical disability	29.00	0	1	31.39	5.19	122
Street lifestyle/reputation *	28.84	4.25	19	31.83	5.21	104

* Significant difference between yes and no responses on mean school connectedness level, $p < .05$
** Significant difference between yes and no responses on mean school connectedness level, $p < .001$

To begin, school connectedness was not associated with ratings of physical health, satisfaction with how the participant's body looks, and emotional distress. It was found that higher levels of school connectedness were associated with decreased body weight perceptions, $r = -.29, p < .001$. It was also found that school connectedness was not associated with considering, or attempting suicide (see Table 8). However, it was found that those participants who planned a suicide attempt had lower levels of school connection, $t = -3.27, p < .001$. Finally, participants reported similar levels of connection

to school regardless of being discriminated against or not, except for discrimination due to street lifestyle or reputation, $t = - 2.36, p < .05$.

Family connectedness was not found to be associated with ratings of physical health, and emotional distress. It was found that participants who planned a suicide had lower levels of family connection. However, there were no significant difference on family connection level between participants who considered or actually attempted suicide and those who did not (see Table 9). Participants reported similar levels of connection to family regardless of being discriminated against or not.

Table 9
Mean family connectedness scores associated with suicide

Variable	Yes			No		
	M	SD	n	M	SD	n
Considered suicide attempt	43.30	10.01	37	47.27	8.35	89
Plan a suicide attempt *	38.33	10.90	12	46.92	8.47	114
Attempted suicide	40.38	10.31	8	46.49	8.86	118

* Significant difference between yes and no responses on mean family connectedness level, $p < .001$

Research Question 3

Independent sample t-tests were used to determine whether participants who dropped out of high school were more or less likely than the participants who were in-school or graduated, to be involved in the eight delinquent behaviours comprising the delinquency construct, the results were not significant. When individual delinquency items were contrasted, participants who dropped out were more likely to be addicted to

alcohol and marijuana, and more likely to use illegal substances than participants' in-school/graduated (see Table 10). However, participants in-school/graduated were more likely to have been involved in a physical fight in the past 12 months than participants who dropped out.

Table 10
Chi Square analysis of school attendance and delinquency items

Variable	In-school Graduated	Dropped out
	no. (%)	no. (%)
Ever charged/convicted of a crime	17 (20.7)	16 (32.7)
Ever do illegal drugs ***	41 (50.0)	44 (89.8)
Expelled from school	11 (13.4)	5 (10.2)
Suspended from school	19 (23.2)	7 (14.3)
Addicted to alcohol **	14 (17.3)	18 (36.7)
Addicted to marijuana ***	12 (14.8)	21 (42.9)
Carry a weapon	5 (6.1)	3 (6.1)
Involved in a physical fight **	36 (43.9)	9 (18.4)

* $p < .05$
** $p < .01$
*** $p < .001$

PPMC and independent sample t-tests were used to determine whether school attendance was associated with health and well-being for this sample. Participants who were in-school and who graduated reported similar levels of physical health, satisfaction with their body, perception of body weight, and emotional distress. Furthermore, participants in-school and graduated were equally likely as participants who dropped out to know someone who attempted suicide, considered or planned suicide, and actually

attempt suicide. Finally, participants reported similar levels of discrimination for any reason, whether they were in-school/graduated or dropped out from high school.

Research Question 4

In total, 33% of the sample have been pregnant or gotten someone pregnant. Chi-square analysis was conducted to determine whether male or female participants were more likely to have gotten someone pregnant or get pregnant, the results were not significant. In addition, 23% of the participants have children.

Participants who have been pregnant or gotten someone pregnant (heretofore referred to as 'pregnant') are similar to participants who have never been pregnant or gotten someone pregnant (heretofore referred to as "never pregnant") in many ways. Both the pregnant and never pregnant participants were equally likely to have ever been in-care of the government (see Table 11). Furthermore, both pregnant and never pregnant youth were equally likely to have considered, planned or attempted suicide. Pregnant and never pregnant participants differ on some factors as well. Pregnant youth were significantly older than never pregnant youth, $t = 8.11$, $p < .001$. Pregnant youth were more likely to drop out of school, work during the school year, and report that they had friends who dropped out of school. Pregnant youth also scored significantly higher on the delinquency construct than never pregnant youth, $t = 2.68$, $p < .01$. It is interesting to note that youth who dropped out and youth who were in-school or graduated were also similar on the above mentioned contrasts.

A Word About Age

It was noted above that participants who dropped out of school were significantly older than participants who were in-school or graduated. It is therefore difficult to

Table 11
Chi-square analysis of variable for pregnant and never pregnant participants

Variable	Pregnant	Never Pregnant	χ^2
	no. (%)	no. (%)	
Ever "in-care" of the government	6 (14.3)	11 (12.8)	.055
School			
Suspended from school	8 (19.0)	17 (19.8)	.009
Expelled from school	7 (16.7)	9 (10.5)	.992
Failed a course	12 (29.3)	36 (42.2)	2.008
Considered dropping out of school	29 (74.4)	35 (41.2)	11.787***
Had a sibling who dropped out	26 (74.3)	26 (56.5)	2.729**
Have friends who dropped out	40 (95.2)	66 (78.6)	5.825*
Substance use			
Addicted to alcohol	16 (38.1)	15 (17.6)	6.370**
Addicted to marijuana	16 (38.1)	17 (20.0)	4.786*
Ever tried illegal drugs	41 (97.6)	42 (48.8)	29.457***
Contract a sexually transmitted disease	13 (31.7)	6 (7.1)	12.898***
Ever physically abused or mistreated	25 (61.0)	34 (40.5)	4.646*
Ever sexually abused	15 (35.7)	17 (20.2)	3.540

* $p < .05$
** $p < .01$
*** $p < .001$

conclude whether differences between participants who dropped out of school and participants in-school/graduated exist because of dropping out of school, or, because of age. Efforts have been made to control for age and will be outlined below.

To begin, participants between the ages of 16 to 19 were selected. Within this group, 13 participants had dropped out, and 36 youth were in-school/graduated. To deal with unequal sample sizes again, the harmonic mean was calculated, which was subsequently used to calculate the non-centrality parameter, or the effective sample size. In other words, by using unequal sample sizes, it took 49 participants to obtain the same power level that 38.2 participants would have yielded, had there been equal sample sizes (Howell, 1997). This effective sample size was then used to calculate power for this study. In this case, with a non-centrality parameter of .93, and a medium effect size for chi-square analysis, independent sample t-tests or PPMC, power at the .05 significance level was calculated to be .17, or, a 17% chance of rejecting the null-hypothesis.

Chi square analysis was conducted for participants who dropped out or were in school between the ages of 16 to 19 on variables relating to dropping out, delinquency items, and health and well-being items (see Table 12). To begin, participants who had dropped out of school were significantly more likely to have considered dropping out of school, $\chi2$ (1, N = 48) = 9.118, $p < .005$. There were no significant differences between those participants who dropped out and in-school/graduated on involvement in a physical fight in the past 12 months or ever use mushrooms. All other contrasts contained at least one cell with an expected count less than five and therefore violated test principles. When considering percentages alone, it is interesting to note that on many occasions, participants who dropped out reported similar frequencies of behaviors as those in school

Table 12

Chi-square comparisons for participants who dropped out and those
in-school/graduated between the ages of 16 to 19

Variable	Dropped out	In-School/ Graduated
	no. (%)	no. (%)
Have friends who dropped out	13 (100)	33 (91.7)[t]
Have friends who work for a living	9 (69.2)	20 (57.1)
Have you been expelled from school	1 (7.7)	4 (11.1)[t]
Have you been suspended from school	1 (7.7)	9 (25.0)[t]
Ever considered dropping out of school	10 (76.9)	10 (28.6)**
Have a sibling drop out of school	10 (76.9)	7 (50.0)[t]
Addicted to alcohol	11 (84.6)	34 (94.4)[t]
Addicted to marijuana	7 (53.8)	32 (88.9)[t]
Ever forced/coerced to have a sexual relationship	3 (23.1)	2 (5.7)[t]
Consider attempting suicide	7 (58.3)	9 (25.0)[t]
Ever been physically abused/mistreated	6 (54.5)	15 (41.7)[t]
Ever been sexually abused	5 (41.7)	6 (16.7)[t]
Involved in a physical fight	10 (76.9)	20 (55.6)
Ever charged or convicted of a crime	3 (23.1)	4 (11.1)[t]
Ever pregnant	6 (46.2)	4 (11.8)[t]

[t] denotes 1 or more cells with less than an expected count less than 5

** $p < .01$

or graduated. For example, both groups were equally likely to have had friends who dropped out, be expelled from school, and reported addiction to alcohol. Participants who dropped out reported slightly higher frequency of having a sibling drop out, and being addicted to marijuana. In addition, independent sample t-tests were then calculated to determine whether there were differences between participants who dropped out and those in-school/graduated on emotional distress, school and family connectedness, and the delinquency construct, the results were not significant. Finally, PPMC was calculated to assess the relationship between school attendance and emotional distress, school and family connectedness and the delinquency construct, the results were not significant.

Comparisons were then made between three different age groups, regardless of whether the participant had dropped out of school or not. The three age groups were as follows: 12 to 15 years old (39 participants), 16 to 19 years old, (49 participants), and 20 to 25 years old (43 participants). Chi square analysis was conducted to determine whether there were any differences between the three age groups on variables related to dropping out of school, delinquency items, and health and well-being items. The 16 to 19 year olds and 20 to 25 year olds were more likely than the 12 to 15 year olds to have friends who dropped out of school, and friends who worked for a living. Not surprisingly, the 20 to 25 year olds were more likely to have considered dropping out of school or actually drop out of high school, and were less likely to have failed a course in the last year. Interestingly, the 12 to 15 year olds were more likely than the 16 to 19 year olds to report that they were addicted to alcohol. Furthermore, the 16 to 19 year olds and the 20 to 25 year olds were more likely to report pregnancy, witnessing someone being abused, ever being physically abused, and ever being sexually abused. Finally, older participants were more

likely to report ever trying illegal substances. There were no significant differences between the three age groups on whether they had been suspended from school, on whether they reported being addicted to marijuana, on whether they had ever been charged of or convicted of a crime, on whether they had been involved in a physical fight in the past year, considered attempting suicide, and experienced discrimination for any reason. In sum, analyses based on age parallel most of the analyses differentiating participants who dropped out of school versus those in-school/graduated.

Finally, research question two was re-analyzed by conducting partial correlations controlling for age. The partial correlation coefficients differed from the PPMC coefficients by an average of $M = .017$, $SD = .012$, with the range of differences being .005 to .0431. In other words, the differences were negligible.

<u>Research Question 5</u>

To begin, participants were asked what they thought were the best and worst things about going to high school. In general, most participants reported that having and spending time with friends and learning was the best part; and most participants reported that getting up early, homework and racism were the worst part of high school. When asked what the advantage of staying in school was, 40% reported learning and getting an education/graduating, and 30% reported getting a good job were the advantages. When asked what the disadvantages of staying in school, common responses by participants were: "boring and it starts too early," "catching a ferry everyday," "missing out, it makes me feel like I don't spend enough time with my family," "teachers you don't like," and "typical teenagers, bullying etc."

Participants were asked "Why did you drop out of school?" In total, seven respondents reported that they dropped out due to pregnancy and parenthood. Some participants indicated that they dropped out for school related reasons, because of problems at home, because of a job, or because they did not like to catch the ferry every morning (see Table 13). In total, two youth reported that they dropped out of school because their friends had dropped out. Finally, a few participants indicated that they did not know why they had dropped out.

Participants were also asked "was one reason for dropping out of school most important for you?" In total, 24% indicated that they did not have a most important reason; while an additional 24% reported that they did have a most important reason, but did not specify that reason. Participants reported family, pregnancy/parenthood, and school factors as important reasons for dropping out, and some youth reported that they regretted dropping out (see Table 14).

Research Question 6

In total, 81% of the participants who dropped out reported that they had thought about dropping out. When participants who dropped out were also asked about the likelihood that they would ever finish high school, 8% were 100 percent certain that they would finish high school. Of the youth who dropped out, 73% had a sibling drop out of high school as well. Furthermore, all of the youth who dropped out had also had a friend drop out of high school.

When asked how long did the participants feel like they wanted to drop out of school before they actually did, the most frequent response was two months (20%), with 18% taking one month or less, and 16% taking one year or more to decide and drop out

Table 13
Why did you drop out of school?

Participant responses

School related reasons

- I had a big problem with a teacher
- Bad grades
- It was hard and I wanted to be in other places
- Cause I didn't seem to keep up and didn't feel that I could finish
- I hate school
- I skipped school too much
- It was hard to keep up and I felt discouraged
- Because I was tired of catching the ferry every morning
- Cause I was doing bad and smoked pot
- Got picked on all the time
- Cause I didn't like going to Port McNeil
- Other kids
- My friends did (drop out)

Family and home

- I ran away to live with my aunt, was kind of rough for me, couldn't concentrate properly
- Problems in home, choices I made in life not enuff insite (sic) in life or the future or myself
- Because I became a father
- Because I got pregnant with my son
- Too many problems in my life
- Because I got too carried away with my boy friend and couldn't trust
- The loss of my mother, I was 15 years old
- My dad passed away, and the teachers were assholes, well, maybe one of them wasn't
- Felt like I was old enough to have kids, I was old enough to work and live independently

Job related reasons

- I dropped out because I had a good job
- Knew that I was going to be an artist
- Wanted to work full time, being bullied, didn't see the importance

Table 14
Was one reason for dropping out of school most important for you?

Participant responses

Family, pregnancy/parenthood related reasons

- Missed my family, wanted to go home
- My aunt died, skipping too much
- I wanted to have a child, was carrying at the time when I dropped out. I wanted her to have a good mother
- Yes, because no one was gonna (sic) feed our kids or put clothes on their backs but me, gotta (sic) live up to responsibility
- Yes, I stayed at home for my son
- I got pregnant

School related reasons

- Couldn't bring a lunch
- Didn't get to school enough
- They were racist
- Got tired of it
- Just wanted a break
- Didn't like to catch the ferry
- Too much pot going around the school
- A little bit of peer pressure
- It was sucky

Regrets

- No, I should have stayed
- No, I regret dropping out of school, I am planning on getting my upgrade through North Island College
- Yes, I should never have done it

of school. Participants were asked to indicate who they talked to about the decision to leave school. In total, 57% of those who dropped out of school reported that they did not talk to anyone, while 26% reported that they talked to one person about the decision to leave school. When asked who they talked to about the decision to leave school, the most frequent response option chosen was "my parents," followed by "my friend."

<div align="center">Research Question 7</div>

Participants were asked what they would recommend the school system do differently in order to increase completion rates for the students. Some participants reported that they would have liked to have more support, concerns about teachers, and concerns about the classes and curriculum, and general comments about the school system (see Table 15). In total, 20% of the participants reported that they thought there was nothing wrong with the school system and therefore needed no changes, making comments like: "it wasn't the school, it was me," "nothing, I was just a very bad undisciplined teenager," and "nothing, its just I had to make money to raise my kid." Finally, one participant commented that a mentoring system would be beneficial, "to those or not on honour role and having trouble in school, talk to give insite (sic), encourage them to work hard, believe in them self."

Participants were then asked what changes they would like to see. Some participants commented again that they would like to see more First Nations teachers; would like to have more support, such as one-to-one help, and reduced racism and bullying. These students made comments like: "more community involvement," "no more racism," "understanding the students," "nothing at all but racism and bullying," and "respect." Furthermore, some participants made more specific comments like: "a school

Table 15
What would you recommend the school system do differently so that you
would have stayed in school?

Participant responses

Support

- Listen
- more help
- More support, help to understand work and a better support network in the community
- Payed (sic) more attention to my needs, like how would school come easier to learn to me

Teachers

- Different teachers
- Get better teachers
- Have all native teachers to show that we ain't (sic) so bad
- Have more native teachers
- Nicer people and teachers
- Teach better
- To have more teacher assistance

Classes and curriculum

- Be more fun and exciting
- Have more fun and interesting classes
- In earlier grades have First Nations studies available
- Make classes shorter in the day
- More cultural activities, more teachings of contemporary First Nations' issues
- More culture, why learn about other people instead of my own people

School system/school location

- A better school system
- Build a high school in home town
- Have a lunch program
- I wish we didn't have to catch ferry in morning
- More sports happening, need something to be proud of

closer," "football team," "less academic career requirements," "more education on health,

life and job opportunities," "more multicultural events and activities," "more sports,"

"more work," "new and improved teaching strategies," and "shorter days."

<div align="center">A Final Note</div>

To some extent, this project maintained a community-based approach. Many

Band Council members, teachers and elders promoted youth participation in the AYHS.

Furthermore, many youth were interested in the progress of the project, frequently

referring to the project as "*our* project," or making comments like "*we* need to get more

youth to participate."

Remarks made by participants during the administration of the AYHS were

recorded. Frequently asked questions included: "why are you doing this project," "why

are you paying us," and "what is going to happen to the information later." A few

participants made reference to being "over-studied" and that they didn't like "information

taken from Native people." Feedback on the AYHS questions included: "alright," "easy,"

"interesting," "negative," "stupid," and "awesome." Finally, participants were asked

whether they would be interested in participating in future projects relating this study. In

total, 52 (40%) of the participants said that they would be interested in being involved in

future projects.

<div align="center">Discussion</div>

This study included the administration of the AYHS to First Nations youth in

Alert Bay, B.C. The purpose of this study was to determine whether school and family

connectedness was associated with delinquent and health promoting behaviors, whether

school attendance was associated with delinquency and health and well-being, why and

how First Nations youth drop out of high school, and recommendations First Nations

youth make to improve school completion. This section will begin with a brief discussion

of each research question, followed by a general discussion, then a review of the

limitations of this study, and future directions for research.

The first research question was intended to describe demographic, family, school,

health, delinquency, substance use and sexual behavior variables, and determine whether

they were related to school attendance for First Nations youth. Contrasts between male

and female participants, and between participants who dropped out and those in-

school/graduated were of particular interest. In this study, there were no differences

between male and female participants on any of the delinquency items. This parallels the

findings from the AHS where male and female participants demonstrated similarities,

specifically, patterns of substance use, and sexual behavior. In addition, analysis of early

conduct disorder revealed that developmental patterns were the same for male and female

participants (Fergusson & Horwood, 1998). Given that Alert Bay is a small community;

it is not unlikely that male and females would be exposed to similar environmental

pressures to engage in delinquent behaviors such as drug use, fighting or some criminal

behaviors. Consequently, it is reasonable that both male and female participants in this

study would engage in similar levels of delinquent behavior. It is interesting to note that

while Kaminski (1993) found gender differences with respect to pregnancy, this study did

not find that as both male and female participants were equally likely to have been

pregnant or gotten someone else pregnant.

Findings in this study replicated previous research relating to youth who drop out

of school. For example, Ellenbogen and Chamberland (1997) found that youth who

dropped out were more likely to have a social network where education was not valued, with friends or siblings who have dropped out, and friends who are working for a living. In this study, participants who dropped out were more likely to have friends who worked for a living and who dropped out of school. In addition, not completing high school was associated with increased drug use. In this study, all of the participants who dropped out had tried marijuana or alcohol, and were more likely to report being addicted to alcohol and marijuana. Furthermore, youth who were likely to drop out were more likely to have parents with low education levels, particularly the mothers (Chambers et al., 1998). In this study, it was found that more than half of the parents did not complete high school, and the parents of the participants who dropped out were more likely not to have completed their high school education.

Watkins et al. (1994) compiled a list of factors that predicted overall global risk, including risk for grade retention and school failure. The AYHS was capable of obtaining information for 18 of the 45 specified predictors. Participants who dropped out in this study demonstrated many of the factors specified by Watkins et al. (1994), such as pregnancy/parenthood, use of drugs, sexually or physically abused, mother and father did not graduate from school. Interestingly, participants who dropped out of school did not differ on the following specified predictors: attempted suicide in the past year, suspended or expelled from school, had a sibling drop out, failed a course in the past year, parents employment status and participation in extracurricular activities.

The second research question was intended to assess whether there was an association between school or family connectedness, and delinquency and health and well-being. Previous research focusing on school and family connectedness have all

concluded that higher levels of school and family connectedness were associated with decreased levels of delinquent behaviors and increased levels of health and well-being (Jacobson & Rowe, 1999; Neumark-Sztainer et al., 1997; Pesa et al., 2000; Taylor-Seehafer & Rew, 2000; Tonkin et al., 1999). It is interesting to note that despite previous robust findings, there were limited associations between school and family connectedness, and delinquency and health and well-being in this study. It was found that school connectedness, not family connectedness, was negatively correlated with delinquency. Additionally, school connectedness was found to be associated with planning a suicide attempt and the experience of discrimination due to street lifestyle or reputation. Family connectedness was not found to be associated with health and well-being items except planning a suicide attempt.

Why then were these findings different than the previous findings? In this study, both the school and family connectedness scales demonstrated sufficient item-reliability. It could be the case that item reliability was elevated due to the two additional questions for each scale. When item reliability was recalculated without the two questions, the differences were negligible. It could be questioned whether these scales were inappropriate to use with this population, that perhaps they were not culturally sensitive. It should be noted that these scales had been administered to other Aboriginal populations in both B.C. and the United States. One suggestion prior to conducting this study was that the family connectedness scale would not be appropriate for use with Aboriginal populations given the different family structure, that it is often the case that people in Aboriginal communities refer to their family members much more broadly to include members outside of the nuclear family. To that end, questions were included to ascertain

who the participant was thinking of when responding to the family connectedness

questions. Overall, the majority of participants thought of their biological parents or

emotions they had when thinking of their parents. It could be concluded that the use of

the family connectedness scale was then appropriate. Speculations for this study's

different findings could include the fact that this sample was from a small community of

youth in and out of school and at older ages. Other samples were province wide or

national sample including only youth in school. It could be the case that this study

demonstrated a community effect, that even though most participants demonstrated

moderate to high levels of connection to school and family, other influences were

operating, such as peer influences, such that delinquent behavior would still occur, and

family connection would have limited influence.

The third research question was intended to determine whether school attendance

was related to delinquent behaviors and health and well-being. When considering the

delinquency construct, there were no differences in level of delinquent behavior between

participants who dropped out and those in-school/graduated. However, participants who

dropped out of school were more likely to have tried illegal substances, and report being

addicted to alcohol and marijuana. School attendance had no bearing on the health and

well-being of this sample. Previous research findings have noted that factors such as

engagement in risky behaviors, substance use, and emotional distress have been

determined to contribute to, and result from, early departure from school (Loeber &

Farrington, 1998). It should be noted that if an association were present, it would not be

causal. Furthermore, the average time span since participants dropped out of school was

5.45 years. It could not be stated with any certainty that delinquent behaviors contributed

to dropping out of school, or occurred as a result of dropping out of school. The same conclusion could be drawn for the association between school attendance and health and well-being. Other competing factors such as peer influences, high drop out rates, and environmental factors could explain the lack of association between school attendance and delinquency and health and well-being.

The fourth research question was intended to assess the relationship between pregnancy/parenthood and school, emotional, and delinquent behaviors. Pregnant participants were more likely than never pregnant participants to drop out of school, to have friends who dropped out of school, and to engage in delinquent behaviors. Interestingly, the profile for pregnant participants was very similar to that of the participants who dropped out of school. Both participants who were pregnant and participants who dropped out, were older than their counterparts, both were more likely to have tried illegal substances and be addicted to alcohol, more likely to have friends who worked for a living, have friends who had dropped out of school, and more likely to have even been physically or sexually abused. These findings replicate the studies by Kasen et al., (1998), Ellenbogen and Chamberland (1997), and Fergusson and Horwood (1998). While the findings from this study were similar with respect to involvement in delinquent behavior and a social network of peers who were working, pregnant or dropped out, this study was different in that both males and females were equally likely to have been pregnant or gotten someone pregnant. The Ministry of Education noted that pregnancy and parenthood were primary reasons for youth to drop out in B.C. While not all of the participants who dropped out cited pregnancy or parenthood as the primary

reason, there seemed to be a very strong association between pregnancy and dropping out.

The fifth research question was intended to find out why these First Nations youth dropped out of school. Previous research on why youth leave school early has concluded some major themes such as school related variables, family problems, accelerated advancement to adult responsibilities such as pregnancy or work, and peer influences. This study paralleled previous research in that participants offered similar themes of reasons for dropping out of school such as: pregnancy or parenthood, problems at home, death in the family, and jobs. While previous research noted general themes for leaving school early, this study had community specific reasons for leaving school early. As stated above, for youth in Alert Bay to attend high school, they must leave early in the morning by ferry to Port McNeil, a predominantly non-Aboriginal community. Many youth cited that they did not like the commute to the high school, or that they had to get up so early to go to school making it a very long day. In addition, some students reported that they experienced racism and bullying from teachers and fellow students. Previous research also noted that youth who were likely to drop out of high school found school unrewarding, lacked positive experiences in school, and had academic problems in school. In this study, some participants noted that school factors such as not liking their teachers, drug use and drug presence at the school, and difficulties with the course work as being the most important reason why they left school early.

The sixth research question was designed to find out how the decision making process to drop out of high school occurred for the participants. Much of the research on dropping out of school and decision making concludes that decision making capacities

(and responsibility) for adolescents should be enhanced whenever possible (Dryfoos, 1995). Lamb (1994) noted that what youth do after they drop out provides insight into the decision making process, opportunities and pressures for youth. For example, if the youth dropped out to work, then it is likely that they want to earn money for whatever reason. That aside, there is very little research on how youth make the decision to drop out of school. This study wanted to learn how long youth were thinking about dropping out of school, who they talked to about the decision, did they have friends or siblings who also dropped out, did they have a social network that valued school, had they ever considered dropping out of school, and what was the likelihood of completing high school. It took participants any where from less than a month to over one year to make the decision to drop out. It is interesting to note that the majority of participants talked to no one about the decision, especially given that all of the participants who dropped out had a friend drop out, and a majority had a sibling drop out of school. Of those participants who did talk to someone, most reported that they talked to their parents about the decision. It is also interesting to note that the majority of parents (84%) agreed that education was important for success in life. More research needs to be conducted on the decision making process for dropping out of high school.

The last research question focused on what the participants recommended the school system change in order to increase completion rates for First Nations students. Many participants commented that they would like to have more First Nations teachers, have more First Nations curriculum, more support from teachers and the community, new teaching strategies, address bullying issues, respect, and a school in their home town.

In sum, this study replicates previous research on what characterizes an adolescent at risk for dropping out of school. This study deviates from other findings with respect to the similarities between youth who dropped out and those in-school/graduated, and that there existed few gender differences in this sample. Lower levels of school connectedness were found to be associated with dropping out of school, and delinquency, but family connectedness did not seem to have an impact on risky behavior or health and well-being. Furthermore, school attendance was found to be significantly related to drug use, but school factors that have been previously shown to contribute to dropping out of school did not have an impact with this sample.

It should be noted that the age effect or age discrepancies between the participants in-school/graduated versus participants who dropped out of high school affected the interpretation of the data analysis is related to (see Figure 4). The average age for participants who dropped out was significantly higher than those participants in-school/graduated. Furthermore, a majority of the participants who dropped out were 19 years or older, and the majority of the participants in-school/graduated were 18 years or younger. This age effect obscured the results of this study. For example, it was not surprising to discover that participants who dropped out and older in age were more likely to have had a sexual relationship, or to have ever been pregnant. It was also not surprising to find that participants who were younger and in school were more likely to have been involved in a physical fight in the past 12 months. In addition, it was not surprising to learn that participants who dropped out of school were equally likely as participants in school to have failed a course, or suspended or expelled from school in the past year, especially since participants who dropped out of school had already been out of

school on average of 5.45 years. It could be the case, therefore, that the course failing, suspension and expelling rates were underestimated. In effect, these events were strongly associated with age. It was more probable that, as youth get older, they were more likely to engage in sexual relationships or to have children. It was also probable that younger adolescents were more likely to be involved in physical fights, or that youth in school were more likely to fail a course or be suspended than those who have already dropped out.

Further statistical analysis was conducted to control for the age effect present in this study. Chi square analyses were conducted to control for age, and only two of the analyses did not violate test principles. Frequencies were reported for participants who dropped out and those in-school/graduated between the ages of 16 to 19. Although it was not possible to ascertain whether differences in frequencies were statistically significant, it was interesting to note that, on the surface, differences did exist. It was interesting to find that participants who were in-school/graduated reported higher frequencies of being suspended from school. But it may be the case that these youth already were out of school for more than a year, so consequently would not report being suspended in the past year. Despite some interesting trends, the level of power was insufficient to draw conclusions about the analysis. In general, it could be said that when age was controlled for, the relationships that previously existed were now reduced, but only slightly.

General discussion:

To begin, Alert Bay is a small, remote and isolated community with high unemployment rates and poor economic conditions. Many efforts have been made by concerned members of the community to improve the living conditions and well-being of

the population who live in Alert Bay, by implementing programs and taking control of

health care and education. Nonetheless, Alert Bay still has abysmal high school

completion rates. In some capacities, this study furthered previous research in that

characteristics that typify high school dropouts were found here. To accept some of the

findings, one would conclude that delinquency in general is a considerable issue. All of

the participants had been involved in at least one of the delinquent behaviors that

comprised the delinquency construct. Nearly all of the participants had tried alcohol and

marijuana, with many reporting that they were also addicted to substances. Furthermore,

one-quarter of the participants had been charged with or convicted of a crime, and over

one-third had been involved in a physical fight. Only connection to school and pregnancy

distinguished between levels of involvement in delinquent behavior. Any intervention

based on this study must focus on more than school completion.

Who is at risk of dropping out of high school and at-risk in general in this sample?

When considering risk factors that have been identified in mainstream psychological

literature, most or all of the youth who participated in this study would be at-risk in some

capacity. In particular, youth who recently had a family member die yet still came to

participate, and youth who reported to be addicted to alcohol and marijuana, were at risk

of unhealthy outcomes. There is no denying that the event of or combination of any of the

45 predictors outlined by Watkins et al. (1994) would have deleterious effects on any

youth, no matter what the social status is, whether they live in urban or rural areas, or

what ethnic group they belong to.

Alternatively, who is healthy in this sample? Most of the youth expressed

moderate levels of emotional health and connection to their family. Despite the fact that a

greater percentage of this sample compared to provincial data, know someone who committed suicide, a smaller percentage of these youth planned or actually attempted suicide. Of course this data is potentially underestimated as it is impossible to obtain data from those youth who have already attempted suicide.

The Ministry of Education and some of the literature noted that pregnancy and parenthood were primary reasons for adolescents to drop out of school. Furthermore, Marin (1995) and Martinez and Cranston (1996) noted that ethnic minority youth were particularly susceptible to getting pregnant. First, why would First Nations youth in this community be more susceptible to getting pregnant? And second, is it necessarily harmful for First Nations adolescents leave school to have children? To address the first question, only seven of the 49 youth who dropped out reported that pregnancy or parenthood were the catalysts for leaving school early. Martinez and Cranston (1996) hypothesized that it was poverty, substandard housing, disrupted home life, low aspirations, inadequate goals, and low parental education levels that contributed to ethnic minority youth getting pregnant and leaving school early. A case can be made that many of these factors exist for the First Nations youth in Alert Bay. Many of the parents do not have a high school education, youth may have limited aspirations and goals due to high unemployment rates, and it could be the case that home life is disrupted due to substance use or family violence. To address the second question, for the most part, youth who were parents expressed happiness about their situation. The social network in Alert Bay is such that no child is unwanted, and they adhere to the adage that "it takes a community to raise a child."

When conducting research with Aboriginal communities, it has come to be expected that the historical context be acknowledged and understood by the researcher. How then does history impact this study? To begin, many parents and community members in Alert Bay have attended residential schools. It would not be an exaggeration to state that the residential schools have had a profound impact in this community. It has been thought that thorough efforts of the missionary and government agents to alter the self-concepts of Kwakiutl people by institutionalizing them in residential schools, was effective in disintegrating resources of Native learning and personhood (Bohni-Nielsen, 2001). In this study, it was found that just over half of the parents of this sample did not complete high school. Some parents reported that they did not trust the educational system, while others found it necessary for success in life. This explanation of how history is related to contemporary issues explains how history is a *cause* of current problems. History has also been rationalized as a *solution* to problems, such as embracing history, or adopting and valuing your ethnic traditions and culture. To that end, the T'lisala'gilakw School offers curriculum focusing on Native tradition such as dancing, drumming, singing, and language. Many efforts have also been made by concerned community members to revive the Kwakwala language. At the time of survey administration, another Master of Arts thesis was being completed based on language survival.

It is understood that researchers have begun to recognize the importance of including historical perspectives when examining psychosocial phenomenon for Aboriginal populations. It is also understood that many studies that currently exist conclude with the call for First Nations people to embrace their history, their culture and

traditions as a means to gain a better sense of self and self worth. Waldram (2002) commented that there exists a "sloppy use of the concepts of culture and history to explain both problems and solutions. The research is rife with unproblematized (sic) usages of these concepts, which are often central to the explanations offered" (p.1). It is important to understand how history is operationalized – what is history's role in problems faced by First Nations people, how can history be operationalized with respect to contemporary education? How exactly can history be used in solutions?

It was suggested previously that while residential schools did mete out their own atrocities, there were worthwhile strengths that emerged among Aboriginal people. These strengths have included the cultivation of leaders, a sense of pride, and a notion of "power to", power to act. These strengths are evident in Alert Bay and among the Kwakiutl people at large. It is beyond the scope of this paper to fully discuss the strengths of the Alert Bay people, but they have successfully lobbied against the government on many occasions to obtain much needed services such as health services, education, and currently working on treaty negotiations.

Furthermore, it was suggested that to measure the efficacy of an education system, it is imperative to determine how well it prepares the student for the opportunities and challenges in life, remembering that efficacy will change as life changes. The participants in this study echo this sentiment when they proposed that the education system now needs more Native teachers and more Native curriculum. And how well will contemporary education prepare these youth for the opportunities and challenges before them? For many students, the education system will not prepare them very well. A select few students expressed that they were not challenged enough by the system, but also

mentioned that they were going to leave the island to pursue their educational needs. Many other students expressed that they would have liked to have more practical course work on life skills and technical training.

Limitations

The results in this study have been limited by the small sample size. Specifically, the small sample size limited the sophistication of the data analysis due to lack of statistical power. The small sample size also affected analysis between different age groups, which was necessary given the discrepancies in age between the drop out group and the in-school/graduated group. Data from the Ministry of Education and Alert Bay school administrators suggest that school drop out begins as early as 14 years old for Aboriginal youth, and yet participants who dropped out and were under the age of 18 were underrepresented.

Why were there so few youth who dropped out under 18? Non-response could have occurred for a variety of reasons ranging from competing events in the community and general attitudes towards research. In general, survey administration only occurred during the late afternoon and evening, and although it was possible for youth to participate earlier in the day, no one did. During the first week of survey administration, there were two major funerals of young parents from the community, and there were National Hockey League playoffs in the evening.

In addition, some First Nations communities have become skeptical of research being conducted with themselves as participants. During one survey administration, an elder and grandfather commented "we don't like you to come and take information from the Natives", and one mother initially would not let her child participate because "she

was tired of being studied, it never changes anything." Some youth expressed that they

were not interested in participating, while others were always intoxicated when

approached to participate. However, it should be noted that despite the negative attitudes

toward researchers held by some, overall, this project was widely accepted and promoted,

even by elders in the community. It can be concluded that:

> The word 'survey' in our Aboriginal communities is becoming a dirty word. Too
> many of us tend to back away from surveys, feeling that we have already been
> studied to death and that the conditions are not changing. However, in saying this
> we also understand the need for these studies, but also feel that it must be carried
> one more step to develop and test community based primary health care models
> that will address the needs within remote, rural and urban communities (B.C.
> Aboriginal Network on Disabilities Society, 2001, p.1)

The results in this study are based on a self-report measure which could

potentially be inaccurate for at least four reasons. To begin, the participants may have

been subject to the social desirability bias. The social desirability bias could be present

when the participant is motivated to present themselves or their actions more, or less

favorably. Second, the participants may have perceived demand characteristics and

responded or wrote what they thought I wanted to hear. Third, with respect to the open

ended questions, it may be the case that the participants simply do not know why they

acted in a particular way, or don't know why they believe what they believe. For

example, for those youth who dropped out many years ago, at that time, they may not

have had a reason to drop out. In the future, at the time of survey administration, the

participant could conclude specific reasons for dropping out where originally there was

none. Finally, the participants may have made memory errors, especially in recalling how

many times they used a particular drug or substance, or how old they were when they

first tried drugs or alcohol, or their first sexual experience.

It is often the case that self-report measures are subject to scrutiny because of their reliance on retrospective recall, along with the social desirability bias (Sobell & Sobell, 1990). The question regarding the validity of self-report has been researched extensively, and generally the accuracy of the self-report is increased when the interview is conducted in a clinical or research setting, and the participant is assured of confidentiality (Sobell & Sobell, 1990). In this study, participants were assured of confidentiality, and it is presumed, based on responses to the open ended questions and their interest in subsequent research, that the participants took their involvement in the study very seriously and responded as accurately as they could.

The next major limitation was related to the delinquency construct. There was the possibility of using an a priori set of weights to use all of the data (such as how many times used marijuana, how many days did you have alcohol in the past 30 days) rather than creating dichotomous responses and summing them. Since no differences on the individual items existed, there was no reason to believe that there would be differences when constructed in a different manner. Second, items in the delinquency construct involved different time frames such as "have you *ever*," "in the past 12 months," "in the last school year," "during your life," and "during the past 30 days." These items are not comparable, and it highly probable that some reported behaviors did not occur in that specific time frame. Finally, the delinquency construct did not have sufficient item reliability, meaning that the items did not correlate highly with each other, or were not consistent with the overall construct. Consequently, interpretations based on this data should be made with caution, if at all.

This study only focused on the responses of First Nations adolescents, and did not consider school records or responses from parents, teachers, elders, teachers or other interested community members. To that end, any of the responses given by the youth could not be validated with other input or school records.

Another limitation was the existence of a sampling bias. The first source of sampling bias could be a result of the sampling procedures used in this study. Participant recruitment was accomplished through haphazard or convenience sampling, or surveying any adolescent who was available to participate. It was therefore not established whether the sample of First Nations youth who dropped out of school in this study represented a population of First Nations youth who dropped out of school. There were many other sources for the sampling bias, such as no efforts were made to randomly sample the population. Self-selection bias was another source of sampling bias that could have been present, in that respondents decided that they would like to participate. Conversely, a non-response bias could have been present, in that some youth simply refused to participate, indicating that they had been "surveyed enough," or that they were away from the Alert Bay at the time of survey administration. Another potential source of sampling bias is related to the measurement instrument. The AYHS may have included questions that were not comprehended by the participants, thereby affecting the interpretation of responses. These sources of sampling bias could impose a serious limitation to this study, making it difficult to generalize the findings to the population of First Nations youth who drop out of school.

There were many limitations and strengths to the SCS and FCS. One limitation of these scales was that criterion validity has not been established. The constructs of school

and family connectedness were developed for the purpose of predicting certain behaviors amongst adolescents. To have the most confidence in the SCS and FCS as meaningful and predictive scales, criterion validity is essential. Theoretically, school and family connectedness are promising constructs, but there has not been enough research to date to establish the validity of the construct itself. It is possible that school and family connectedness could be highly correlated with other predictor variables such as school performance or grade point average. It could be the case then that grades are better predictor of health compromising behaviors, or that grades themselves could predict the level of connection to school. Furthermore, school and family connectedness could covary with other variables, so it is important not to look at these constructs in isolation.

Another limitation for the SCS and FCS was that responsiveness or sensitivity has not been established. In the four published studies mentioned in this paper, assessing responsiveness was not a primary concern given that the researchers would have had to re-administer the scale to determine whether the level of school connectedness had changed after some intervention. The lack of sensitivity was particularly important in this case if one is making the assertion that connection to school or family is a protective factor. It has already been established in the literature that dropping out of school is highly correlated with health compromising behaviors. An effective use of these scales would be to administer the scales at various times to adolescents who are at risk of dropping out of school to determine if there are changes in the level of connectedness. If the level were to drop, then appropriate interventions could be developed such that the student would stay in school rather than drop out. Since the sensitivity of the scale has

not been established, it is not certain that any changes detected can be accepted with

confidence.

Recommendations

   Dryfoos (1995) stated that it is time for the health and education systems to

address the deficiencies endured by many students. Dryfoos (1995) also made the

argument that adolescents are faced with incredible stressors such as lack of parental

support, living in troubled communities, and barriers to academic achievement.

Adolescents will not learn under those conditions. Many arguments have been presented

such that school based interventions are not effective or that school staff are not

motivated to intervene for troubled youth (Dryfoos, 1995; Frymier, 1996).

> Perhaps the most powerful argument can be made that all of this will not make
> much difference in the lives of disadvantaged youth. By the time they are
> adolescents, this may be "too little, too late". For some very troubled young
> people, no matter what goes on behind the school hour door, they still must return
> to dangerous households, or the streets. No one would quarrel with the point that
> early intervention is essential, but this should not be used as justification for
> ignoring the millions of teenagers who can still be assisted" (Dryfoos, 1995,
> p.168)

   What are interventions that have worked in the First Nations communities? The

Ministry of Education (2002) has outlined many successful strategies for the Province of

B.C., a few of which will be listed below:

- Community members, parents, teachers and classrooms working together to

  support academic achievement – discourage drug use, encourage youth to stay in

  school, promote traditional language learning

- Encourage a high degree of parental involvement

- Encourage teachers to express high expectations of their students

- Provide a sense of inclusiveness for all students, facilitate the understanding of different cultural backgrounds and individual differences

- Include curriculum that is relevant to the needs and background of the student

- Encourage teachers, parents and students to value personal responsibility

- Ensure safe and orderly learning environments

What interventions could be developed based on information in this study? The participants in this study mentioned that they would like to see more Native curriculum and more Native teachers. Frymier (1996) noted that "Many minority teachers and principals understand the negative consequences of dropping out of school, and they want 'their people' to finish high school and graduate" (p. 7). Efforts have been made in some local Universities, such as the University of B.C., to recruit Aboriginal people to train them in the teaching profession. The First Nations Chief's Health Committee has recently launched a Health Careers initiative wherein they are actively encouraging Aboriginal people to seek education that will enable them to enter health professions (First Nations Chiefs' Health Committee, 2002). To enter health professions such as nursing, dentistry or psychology, students need to be proficient in the sciences and math. One of the initiatives is the School-age math and sciences award program wherein over 100 First Nations adolescents receive an award for achievements in math and sciences. It is hoped that on a Provincial (and National) level, continued efforts will be made to education Aboriginal people and include Aboriginal curriculum in school work.

It is also important to consider how these First Nations youth made the decision to leave school, for the most part, they did not talk to any one about their decision to leave school. Efforts need to be made to further understand the decision making process and

where the most effective intervention can take place. It is evident that most youth do not make the decision overnight, as most youth wait between a few weeks up to one year.

Frymier (1995) suggested that "commitment involves understanding both the short and long term consequences of not finishing high school" (p.7). Thus, it is important to consider the interest level in the course work of the students, the interest levels of the teachers, and the costs to society. Evidence has been presented on the economic and social costs associated with dropping out of school, it is therefore very important to determine what works best for students, teachers, parents and other administrators. Participants in this study commented that they were interested in curriculum on First Nations issues, and life skills training. A study that includes input from students, teachers and parents could be important in identifying what is necessary for curriculum, and what would increase completion rates.

Most of the jobs in Alert Bay require the applicant to have completed high school. Some youth have participated in the 9 month youth employment program in Alert Bay, which stipulates that you must be out of school for one year before you can enter the program. Overall, employment opportunities in Alert Bay are limited; with most of the jobs include working for the Namgis Band administration. In general, most youth are aware that there are limited opportunities for employment in Alert Bay. It does not seem necessary then to change policies related to the youth employment program.

Future Directions

Upon completion of this project, arrangements will be made to present the findings to interested parties in Alert Bay. Interested parties who will be invited will include the youth who participated in the AYHS, teachers, administrators, Namgis Band

Council members, Namgis Health Board members, family members, and elders. After the

findings have been presented, focus groups and workshops will be organized to review

the findings and determine community specific future directions. At the time of

administration of the AYHS, many youth expressed interest in continuing their

involvement in a project that would include increasing completion rates for high school.

It is my intention to make this a community-based project, a theme that was very present

in the administration of the AYHS. It is also intended to promote community capacity

building by working with youth and community members such that they are trained to

continue this project on their own. It is also my intention to work with the Ministry of

Education (Aboriginal Branch) and the Native Education Centre in Vancouver to gain

better understanding of policy and administrative details in Aboriginal education.

As stated above, it is important to understand the impact of history and it's role in

current situations for Aboriginal people. To that end, future research could include

looking at the role of history from behavior change models such as Prochaska's

Transtheoretical Model of Behavior change (Prochaska, DiClemente, & Norcross, 1992),

or Linklater's Treatment/Recovery Model (Linklater, 1991). These two models offer a

stage theory to encourage behavior change for clients. I would place history on a

continuum where no knowledge of history or tradition exists on one end, and the client's

perception of sufficient knowledge at the other end. By using a stage theory, the concept

of history and its role could then be operationalized in order to affect change. I think it

would also be prudent to recognize the pervasiveness of North American culture in First

Nations communities.

Future research should also move away from the deficit model so often used in Aboriginal research and move toward research on healthy individuals, individuals who are healthy in the face of adversity. It is necessary to look at positive factors and strengths, such as trying to understand more about the youth that do finish school, what helps them, what motivates them to finish, and extend these findings to other youth. Furthermore, it is important to consider the goals and aspirations of these youth; do they have goals and aspirations? Do they have faith in the future? What are positive factors in these youths' lives? With respect to education, how will education evolve with the changing times for Aboriginal peoples and culture? It is important to understand this question to better prepare researchers in assessing the efficacy of the education system. It is important to move beyond portraying Aboriginal people as victims, and move toward focusing on positive factors.

Conclusion

This study was an initial and exploratory study to look at issues relating to the high school drop out phenomenon in an Aboriginal community. The ultimate goal of this study was to begin to understand what was going on in this community that led to high non-completion rates, then work with the community on these findings and work toward improving completion rates and increasing healthy outcomes for First Nations youth. Although this study contained many limitations, something was learned about these First Nations youth and what they are saying about their educational experience. Furthermore, a rapport was established with the community, and the youth, facilitating continued involvement for research on this topic. This study provided information on group differences. Any differences, of course, did not imply causality, but could be useful in

identifying possible factors that might be involved in decisions to remain in school or dropout. This information will help to identify interventions that might help to keep Aboriginal youth in school. This will lead to subsequent phases of the research program, which will focus on evaluations of interventions with youth, both those currently in school and those who have dropped out. It is important to note that the phenomenon of early school departure cannot be understood just by looking at the youth; it is also important to work with the schools, the curriculum, the teachers, parents and other community members. It is also important to consider student, teacher and family expectations with respect to education.

Similar to Frymier's (1996) conclusions, this study is founded on the assumptions that it is more advantageous for adolescents to be in school than out of school, that any education is superior to no education, that there are explicit social costs that society must bear when adolescents drop out of high school, and to improve completion or graduation rates, society or community members must find a way to encourage teachers to work with those youth at risk, and encourage the youth themselves.

References

Arellano, C.M., Chavez, E.L., & Deffenbacher, J.L. (1998). Alcohol use and academic

status among Mexican American and White non-Hispanic adolescents. *Adolescence,*

33, 751-760.

Baer, J. (1999). The effects of family structure and SES on family processes in early

adolescence. *Journal of Adolescence, 22,* 341-354.

Barton, W.H., Watkins, M., & Jarjoura, R. (1997). Youth and communities: Toward

comprehensive strategies for youth development. *Social Work, 42,* 483-493.

Bates, S.C., Plemons, B.W., Jumper-Thurman, P., & Beauvais, F. (1997). Volatile

solvent use: Patterns by gender and ethnicity among school attenders and dropouts.

Drugs and Society, 10, 61-78.

Battin-Pearson, S., Newcomb, M.D., Abbott, R.D., Hill, K.G., Catalano, R.F., &

Hawkins, J.D. (2000). Predictors of early high school dropout: A test of five theories.

Journal of Educational Psychology, 92, 568-582.

Battistich, V., & Hom, A. (1997). The relationship between students' sense of their

school as community and their involvement in problem behaviors. *American Journal*

of Public Health, 87, 1997-2001.

Berdondini, L., & Smith, P.K. (1996). Cohesion and power in the families of children

involved in bully/victim problems at school: An Italian replication. *Journal of*

Family Therapy, 18, 99-102.

Blechman, E.A. (1992). Mentors for high-risk minority youth: From effective

communication to bicultural competence. *Journal of Clinical Child Psychology, 21,*

160-169.

Blechman, E.A., & Culhane, S.E. (1993). Aggressive, depressive, and prosocial coping with affective challenges in early adolescence. *Journal of Early Adolescence, 13*, 361-382.

Bohni-Nielsen, S. (2001). *Civilizing Kwakiutl: Contexts and contests of Kwakiutl personhood, 1880-1999.* (Doctoral Dissertation, Simon Fraser University, 2001. Burnaby, B.C.: Ikon Tekst & Tryk Vedbaek.

British Columbia Aboriginal Network on Disabilities Society (2001). *Gaps and barriers to health care services for Aboriginal people with disabilities in B.C.* Vancouver, B.C.

British Columbia Human Rights Commission (2001, December 13). *Pathways to Equality: Hearings on Access to Public Education for Aboriginal People: Discussion Paper.* Available: http://www.bchrc.gov.bc.ca/home.htm

Bryant, A.L., Shulenberg, J., Bachman, J.G., O'Malley, P.M. & Johnston, L.D. (2000). Understanding the links among school misbehavior, academic achievement, and cigarette use: A national panel study of adolescents. *Prevention Science, 1*, 71-87.

Chakrabarti, S., Biswas, D., Chattopadhyay, P.K., & Saha, S. (1998). Family size and emotional adjustment in children. *Social Science International, 14*, 11-18.

Chambers, B., Abrami, P.C., Massue, F.M., & Morrison, S. (1998). Success for all: Evaluating an early-intervention program for children at risk of school failure. *Canadian Journal of Education, 23*, 357-372.

Chandler, M. J., & Lalonde, C. (1998). Cultural community as a hedge against suicide in Canada's Aboriginals. Transcultural Psychiatry, 35, 191-219.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

Cummins, J.R.C., Ireland, M, Resnick, M.D., & Blum, R.W. (1999). Correlates of

physical and emotional health among Native American adolescents. *Journal of Adolescent Health, 24*, 38-44.

Davison-Aviles, R.M., Guerrero, M.P., Barajas-Howarth, H., & Thomas, G. (1999).

Perceptions of Chicano/Latino students who have dropped out of school. *Journal of Counseling and Development, 77*, 465-473.

Dexheimer-Pharris, M. Resnick, M.D., & Blum, R.W. (1997). Protecting against

hopelessness and suicidality in sexually abused American Indian adolescents.

Journal of Adolescent Health, 21, 400-406.

Dryfoos, J.G. (1995). Full service schools: Revolution or fad? *Journal of Research on Adolescence, 5,* 147-172.

Ellenbogen, S., & Chamberland, C. (1997). The peer relations of dropouts: A

comparative study of at-risk and not at-risk youths. *Journal of Adolescence, 20,* 355-367.

Fergusson, D.M., & Horwood, L.J. (1998). Early conduct problem and later life

opportunities. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 39,* 1097-1108.

Figueira-McDonough, J. (1992). Community context and dropout rates. *Children and Youth Services Review, 14*, 273-288.

First Nations Chiefs' Health Committee (2002). Health Careers Initiative. Available

August, 2002: http://www.fnchc.ca/healthcareers.html

Franklin, C., & McNeil, J.S. (1990). School social work works: Findings from an

alternative school for dropouts. *Social Work in Education, 12,* 177-194.

Frymier, J. (1996). Determining drop out rates in large city school districts: Problems and

   accomplishments. *High School Journal, 80*, 1-10.

Gingras, Y., & Bowlby, J. (2000). *The costs of dropping out of high school*. Paper

   presented at the Spring 2000 Pan Canadian Education Research Agenda Symposium,

   Ottawa.

Glascoe, F.P. (1999). Using parents' concerns to detect and address developmental and

   behavioral problems. *Journal of the Society of Pediatric Nurses, 4*, 24-35.

Guagliardo, M.F., Huang, Z., Hicks, J., & D'Angelo, L. (1998). Increased drug use

   among old-for-grade and dropout urban adolescents. *American Journal of*

   Preventative Medicine, 15, 42-48.

Guno, M. (2000). *In the Spirit of Sharing: Honoring First Nations Educational*

   Experiences. Unpublished Master of Arts Thesis, Simon Fraser University, Burnaby,

   British Columbia, Canada.

Howell, D.C. (1997). *Statistical Methods in Psychology, 4th ed.* Toronto, Ontario:

   Duxbury Press.

Institute for Aboriginal Health (2001, February 8-9). *Consortium...Working together to*

   improve Aboriginal health education: A summary report. Available:

   http://www.health-sciences.ubc.ca/iah/consortium/consortiumreport.pdf

Jacobson, K.C., & Rowe, D.C. (1999). Genetic and environmental influences on the

   relationships between family connectedness, school connectedness, and adolescent

   depressed mood: Sex differences. *Developmental Psychology, 4*, 926-939.

Janosz, M., LeBlanc, M., Boulerice, B., Tremblay, R.E. (2000). Predicting different types of school dropouts: A typological approach with two longitudinal samples. *Journal of Educational Psychology, 92*, 171-190.

Jessor, R., Turbin, M.S., & Costa, F.M. (1998). Risk and protection in successful outcomes among disadvantaged adolescents. *Applied Developmental Science, 2*, 194-208.

Jimerson, S.R. (2001). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review, 30*, 420-437.

Jimerson, S.R., Anderson, G.E., & Whipple, A.D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools, 39*, 441-457.

Jordon, W.J., Lara, J., & McPartland, J.M. (1996). Exploring the causes of early dropout among race-ethnic and gender groups. *Youth and Society, 28*, 62-94.

Kager, A., Lang, A., Berghofer, G., Henkel, H., Steiner, E., Schmitz, M., & Rudas, S. (2000). Family dynamics, social functioning, and quality of life in psychiatric patients. *European Journal of Psychiatry, 14*, 161-170.

Kaminski (1993). Rural dropouts: A causal comparison. *Education, 113*, 532-540.

Kasen, S., Cohen, P., & Brook, J.S. (1998). Adolescent school experiences and dropout, adolescent pregnancy, and young adult deviant behavior. *Journal of Adolescent Research, 13*, 49-72.

Kelm, M.E. (1998). *Colonizing Bodies: Aboriginal health and healing in British Columbia 1900-50*. Vancouver, B.C.: UBC Press.

Kortering, L.J., & Braziel, P.M. (1999). Staying in school: The perspective of ninth-grade students. *Remedial and Special Education, 20*, 106-113.

Lamb, S. (1994). Dropping out of school in Australia: Recent trends in participation and outcomes. *Youth and Society, 26*, 194-222.

Liebich, M. (2001, December 12). *Indian Residential Schools*. Available: http://www.sd83.bc.ca/stu/9801/mrl3hp.html

Linklater, C. (1991). *Follow-up and after-care manual*. Ottawa: National Native Alcohol Drug Abuse Program.

Loeber, R., & Farrington, D.P. (Eds). (1998). *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage Publications, Inc.

MacLean, D.A., & Janzen, H.L. (1994). A framework for keeping students in school. *Canadian Journal of School Psychology, 10*, 54-61.

Mahoney, J.L. (2000). School extracurricular activity participation as a moderator in the development of antisocial patterns. *Child Development, 71*, 502-516.

Marin, P. (1995). Using open-ended interviews to determine why Puerto Rican students drop out of school. *Journal of Multicultural Counseling and Development, 23*, 158-169.

Martinez, Y.G., & Cranston, G.A. (1996). Migrant farmworker students and the educational process: Barriers to high school completion. *High School Journal, 80*, 28-38.

Mattson, L., & Caffrey, L. (2001). *Barriers to Equal Education for Aboriginal Learners: A Review of the Literature*. B.C. Human Rights Commission: Victoria.

McNeal, R.B. (1997). Are students being pulled out of high school? The effect of adolescent employment on dropping out. *Sociology of Education, 70,* 206-220.

Ministry of Aboriginal Affairs (2000). *Performance Plan 2000-2001.* Available January 18: http://www.aaf.gov.bc.ca/pubs/performanceplan2000-2001.stm

Ministry of Education (2000). *An overview of Aboriginal Education Results for: Province of B.C.* Available January 18: http://www.bced.gov.bc.ca/abed/prov_notes.

Ministry of Education (2001). *An overview of Aboriginal Education Results for: Province of B.C.* Available January 18: http://www.bced.gov.bc.ca/abed/results.pdf.

Ministry of Education (2002). *Effective schools research: A review of the literature.* Available August 1, 2002: http://www.bced.gov.bc.ca/abed/research/esr/#intro

Moore, K.J. (1994). Florida Seminole school dropouts. *Journal of Multicultural Counseling and Development, 22,* 165-172.

Namgis First Nations (2002). *Namgis First Nation Guidelines for Visiting Researchers/Access to Information Contract.* Alert Bay, British Columbia.

Namgis First Nations Regular Meeting of Council (1999). *Minutes of the regular meeting of council.* Available June 20, 2002: http://www.alertbay.net/council/1999/cm09dec99.htm

Neumark-Sztainer, D., Story, M., French, S.A., & Resnick, M.D. (1997). Psychosocial correlates of health compromising behaviors among adolescents. *Health Education Research, 12,* 37-52.

Nuu-Chah-Nulth Tribal Council (1996). *Indian Residential Schools: The Nuu-Chah-Nulth Experience.* British Columbia: Nuu-Chah-Nulth Tribal Council.

Pesa, J.A., Syre, T.R., & Jones, E. (2000). Psychosocial differences associated with body

weight among female adolescents: The importance of body image. *Journal of*

Adolescent Health, 26, 330-337.

Prochaska, J.O., DiClemente, C.C. & Norcross, J.C. (1992). In search of how people

change: Applications to addictive behaviours. *American Psychologist, 47*, 1102-

1114.

Queen, K.W. (1994). Meeting affective needs of at-risk adolescents. *Psychological*

Reports, 74, 753-754.

Ramasamy, R. (1996). Post-high school employment: A follow-up of Apache Native

American Youth. *Journal of Learning Disabilities, 29*, 174-179.

Ripple, C.H. (1996). Long-term predictors of academic achievement and high-school

dropout among inner-city adolescents. *Dissertation Abstracts International, 56*,

4608.

Roderick, M. (1994). Grade retention and school dropout: Investigating the associations.

American Educational Research Journal, 31, 729-759.

Smith, L.T. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples.*

London: Zed Books Ltd.

Sobell, L.C. & Sobell, M.B. (1990). Self-report issues in alcohol abuse: State of the art

and future directions. *Bevahioral Assessment, 12*, 77-90.

Steffenhagen, J. (2001a, September 1). High school dropouts: The numbers are startling.

The Vancouver Sun, p.A1, A9.

Steffenhagen, J. (2001b, September 3). Grade 8 a time of trouble for drop-outs: High

school fails students at a critical juncture. *The Vancouver Sun*, p.A3.

Streiner, D.L., & Norman, G.R. (1989). *Health measurement scales: A practical guide to their development and use* (2nd ed.). Ontario: Oxford University Press.

Svanvik, D. (2002). *Voices of the Kwakwaka'wakw*. Available March 17, 2002: http://www.l2ed.com/new/totem/html/kwakiutl/kwkutl_E/voices_E/VcCnt1_E.htm

Swaim, R.C., & Beauvais, F. (1997).The effect of school drop out rates on estimates of adolescent substance use among three racial/ethnic groups. *American Journal of Public Health, 87,* 51.

Taylor-Seehafer, M., & Rew, L. (2000). Risky sexual behavior among adolescent women. *Journal of the Society of Pediatric Nurses, 5,* 15-25.

Thompson, E.A., & Eggert, L.L. (1999). Using the suicide risk screen to identify suicidal adolescents among potential high school dropouts. *Journal of the American Academy of Child and Adolescent Psychiatry, 38,* 1506-1514.

Thompson, M.A. (1998). Assessing the Economic costs of high school noncompletion. *Journal of Economics and Finance, 22,* 109-117.

Tobias, J.L. (1976). Protection, Civilization, Assimilation: An outline of history of Canada's Indian Policy. *Western Canadian Journal of Anthropology, 6,* 39-55.

Tonkin, R.S., Murphy, A., Sidhu, A., Liebel, A., Katzenstein, D., Peters, L., & Veitch, B. (1999). *Healthy connections: Listening to B.C. Youth.* Burnaby, British Columbia: The McCreary Centre Society.

Tonkin, R.S., Murphy, A., van der Woerd, K.A., Poon, C., Liebel, A., Katzenstein, D., & Veitch, B. (2000). *Raven's children.* Burnaby, British Columbia: The McCreary Centre Society.

Ukaga, O.M., Yoder, E.P., & Etling, A.W. (1998). Rural and urban eighth graders'

expectations for completing high school. *Journal of Research and Development in*

Education, 31, 155-165.

van der Woerd, K.A., & Cox, D.N. (2001, June). *Assessing academic competence and the*

well-being of Aboriginal students in B.C. Paper presented at the 8th Biennial

Conference of the Society for Community Research and Action, American

Psychological Association, Atlanta.

van der Woerd, K.A., Tonkin, R.S., & Cox, D. N. (2000, June). *The health of Aboriginal*

youth attending school in British Columbia. Paper presented at the Canadian

Psychological Association Conference, Ottawa.

Waldram, J.B., Herring, D.A., & Young, T.K. (1995). *Aboriginal Health in Canada:*

Historical, Cultural, and Epidemiological Perspectives. Toronto, ON: University of

Toronto Press.

Waldram, J.B. (2002). *Research Priorities.* Email communication from author,

Available: waldram@DUKE.USASK.CA

Watkins, R.M., Wilson, T.L.Y., & Watkins, E.L. (1994). At-risk: A local study of a

national issue. *Journal of Instructional Psychology, 21,* 290-297.

Watt-Cloutier, S. (2000). Honouring our past, creating our future: Education in northern

and remote communities. In *Aboriginal Education: Fulfilling the promise.*

Castellano, M.B., Davis, L., & Lahache (eds). Vancouver: UBC Press.

White, K.G. (1999). Navajo adolescent cultural identity and depression. *Dissertation*

Abstracts International: Section B: The Sciences and Engineering, 59, (11-B), 6108.

Wentzel, K.R., & Feldman, S.S. (1996). Relations of cohesion and power in family dyads

to social and emotional adjustment during early adolescents. *Journal of Research on*

Adolescence, 6, 225-244.

Williams, L. (2000). Urban Aboriginal education: The Vancouver experience. In

Aboriginal Education: Fulfilling the promise. Castellano, M.B., Davis, L., &

Lahache (Eds). Vancouver: UBC Press.

Ystgaard, M. (1997). Life stress, social support and psychological distress in late

adolescence. *Social Psychiatry and Psychiatric Epidemiology, 32,* 277-283.

Appendix A

Delinquency Items

1. Have you even been charged with or convicted of a crime?

- ❏ No
- ❏ Yes (mark all that apply)
  - o Break and enter
  - o Robbery
  - o A drug offence (possession or trafficking)
  - o Breach or escape (breach of probation or bail, escaping lawful custody, etc.)
  - o Weapons offence
  - o Solicitation
  - o Homicide
  - o Assault
  - o A sexual offence
  - o Other, specify: _____

2. Have you been expelled from school in the past 12 months?

- ❏ Yes
- ❏ No

3. Have you been suspended from school in the past 12 months?

- ❏ Yes
- ❏ No

4. During your life, have you used any of the following drugs: (Mark an answer for each one)

	0 times	1 to 2 times	3 to 9 times	10 or more times
Cocaine (coke, crack, toot, snow)	❏	❏	❏	❏
Hallucinogens (LSD, ecstasy, acid, PCP, dust, mescaline)	❏	❏	❏	❏
Mushrooms (magic mushrooms)	❏	❏	❏	❏
Inhalants (glue, gas, nitrous oxide, whippits, aerosols)	❏	❏	❏	❏
Amphetamines (speed, crystal, meth)	❏	❏	❏	❏

Heroin	❏	❏	❏	❏
Injected an illegal drug (shot up with a needle)	❏	❏	❏	❏
Steroids without a doctor's prescription	❏	❏	❏	❏
Prescription pills (Talwin & Ritalin, Tylonol 3's) without a doctor's consent	❏	❏	❏	❏
Other, specify: _____	❏	❏	❏	❏

5. Do you think you are addicted to Alcohol?

    ❏   Yes
    ❏   No

6. Do you think you are addicted to Marijuana?

    ❏   Yes
    ❏   No

6. During the past 30 days, did you carry a weapon such as a gun, knife or club?

    ❏   Yes
    ❏   No

7. During the past 12 months, were you in a physical fight?

    ❏   Yes
    ❏   No

Appendix B

Health and Well-being items

1. In general, how would you describe your health?

- ❑ Excellent
- ❑ Good
- ❑ Fair
- ❑ Poor

2. How do you think of your body?

- ❑ Underweight
- ❑ About the right weight
- ❑ Overweight

3. At this time, how satisfied are you with how your body looks? (Mark the number which seems closest to how you feel)

- ❑ 1 (Not at all satisfied)
- ❑ 2
- ❑ 3
- ❑ 4
- ❑ 5
- ❑ 6
- ❑ 7 (Very satisfied)

Emotional Distress

4. Some people need or like to have time by themselves. How often do you feel this way?

- ❑ All the time
- ❑ Quite often
- ❑ Sometimes
- ❑ Rarely
- ❑ Never

5. During the past 30 days, have you felt you were under any strain, stress or pressure?

- ❑ Yes, almost more than I could take
- ❑ Yes, quite a bit of pressure
- ❑ Yes, some/more than usual
- ❑ Yes, a little/about usual
- ❑ Not at all

6. During the past 30 days, have you been bothered by any illness, physical problems, pains or fears about your health?

- ❑ All the time
- ❑ Most of the time
- ❑ Some of the time
- ❑ A little of the time
- ❑ None of the time

7. During the past 30 days, have you been bothered by nervousness or "nerves"?

- ❑ All the time
- ❑ Most of the time
- ❑ Some of the time
- ❑ A little of the time
- ❑ None of the time

8. During the past 30 days, have you felt so sad, discouraged, hopeless or had so many problems that you wondered if anything was worthwhile?

- ❑ Extremely so, to the point I couldn't do my work or deal with things
- ❑ Quite a bit
- ❑ Some, enough to bother me
- ❑ A little
- ❑ Not at all

Suicide

9. During the past 12 months, did you ever seriously consider attempting suicide (killing yourself)?

- ❑ Yes
- ❑ No

10. During the past 12 months, did you make a plan about how you would attempt suicide (kill yourself)?

- ❑ Yes
- ❑ No

11. During the past 12 months, did you actually attempt suicide?

- ❑ Yes
- ❑ No

Discrimination

12. In the past 12 months, have you been discriminated against or treated unfairly because of: (Mark "yes" or "no" for each one)

Yes	No	
❑	❑	Your age
❑	❑	Your gender/sex
❑	❑	Your race or skin color
❑	❑	Your sexual orientation
❑	❑	Your religion
❑	❑	Your physical appearance
❑	❑	Your mental or physical disabilities
❑	❑	Your street lifestyle/your reputation

Appendix C

School Connectedness Scale

1. How do/did you feel about going to school?

- ❑ Hate school/don't like school very much
- ❑ Like school some
- ❑ Like school quite a bit/very much

2. How much do/did you feel that your teachers care about you?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much

3. How often do/did you have trouble getting along with your teachers?

- ❑ Never
- ❑ A few times
- ❑ About once a week
- ❑ Almost every day
- ❑ Every day

4. How often do/did you have trouble getting along with other students?

- ❑ Never
- ❑ A few times
- ❑ About once a week
- ❑ Almost every day
- ❑ Every day

5. How much do you agree or disagree with the following statements?

a. I feel/felt like I was part of my school
b. I am/was happy to be at my school
c. The teachers at my school treat/treated students fairly
d. I feel/felt safe at my school
e. I feel/felt that my school and teachers thinks education is important
f. I feel/felt that my school and teachers wanted me to succeed in school

- ❑ Strongly agree
- ❑ Agree
- ❑ Neither agree nor disagree
- ❑ Disagree
- ❑ Strongly disagree

Appendix D

Family Connectedness Scale

1. How close do you feel to your <u>mother</u>?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much
- ❑ Don't know or does not apply

2. How much do you think your <u>mother</u> cares about you?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much
- ❑ Don't know or does not apply

3. How close do you feel to your <u>father</u>?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much
- ❑ Don't know or does not apply

4. How much do you think your <u>father</u> cares about you?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much
- ❑ Don't know or does not apply

5. How much do you agree or disagree with the following statements?

a. Most of the time, my <u>mother</u> is warm and loving toward me
b. Overall, I am satisfied with my relationship with my <u>mother</u>
c. Most of the time, my <u>father</u> is warm and loving toward me
d. Overall, I am satisfied with my relationship with my <u>father</u>

- ❑ Strongly agree
- ❑ Agree
- ❑ Neither agree nor disagree
- ❑ Disagree
- ❑ Strongly disagree
- ❑ Don't know or does not apply

6. How much do you feel that people in your family understand you?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much

7. How much do you feel that you and your family have fun together?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much

8. How much do you feel that you and your family spend quality time together – like eating dinner together, talking, doing homework etc.?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much

9. How much do you feel that your family pays attention to you?

- ❑ Not at all
- ❑ Very little
- ❑ Somewhat
- ❑ Quite a bit
- ❑ Very much

Appendix E

'NAMGIS FIRST NATION

Guidelines for Visiting Researchers/Access to Information

Not only in Alert Bay but also on many other British Columbia Indian Reserves, visiting researchers are welcome provided that they commit themselves to observing certain 'Rules of Conduct'.   Those for the 'Namgis First Nation have been developed at the direction and request of our Council, Advisors and the Keepers of our Culture.

These rules are not meant to make life difficult for the researcher; on the contrary, they are meant to ensure clarity and fairness in the relationship between, on the one hand, the visiting researcher and his/her supporting institution and possible funding sources, and on the other, the hosting Indian Band, its research and development objectives, and the Band Members serving as institution and staff of the Band.

In exchange for accepting and abiding by the rules, the Band will support the researcher with, firstly, permission to conduct research on the Reserve, and secondly with what pertinent resources it can offer.

Briefly stated the rules and guidelines listed below are intended to ensure that the following basic concerns of the Band are met:

a)   that the research be of benefit to the Band, both in its intent and its outcome;

b)   that it be conducted according to professional standards and ethics;

With regards to the latter, prospective researchers and supporting institutions are referred to section 8 of "Ethical Guidelines for Research with Human Subjects", adopted March 1979 by the SSHRC re: individual and collective rights. Two principles basic to all ethical guidelines are:

1) no harm, and;
2) informed consent.

c)   that the interests of the Band and the confidentiality of informants be protected with regard to the dissemination of original research data to any third party (that is to persons or institutions other than the researcher).

Note:
"The interests of the Band...etc." are to be determined in consultation with the Band and are not to be a matter of unilateral assumption on the part of the researcher or his/her supporting institution.

d)   The Band welcomes projects leading to the dissemination of accurate and respectful descriptions of its heritage and culture, especially when native perspectives and interpretations are included in the presentation.

The Band may wish, however, to retain copyright of both the research data and any publications   (including   papers   presented in   a public or professional forum) arising from the outcome of the research project. This consideration would depend upon the nature of the proposed project, the   degree of   professional assistance provided by the Band, or local concepts of ownership of certain kinds of cultural knowledge.

The matter of copyright and of any restrictions the Band may wish to place on either the dissemination of research data or interpretations derived there fore, should be discussed or negotiated at the outset of the project. Likewise, any conflict between conditions set by the Band on the one hand, and commitments required of the researcher by any other institution or funding source, on the other hand, should be made known to the Band and resolved at the outset.

The RULES and PROCEDURES for visiting researchers wishing to conduct research on the reserve are as follows:

1)   Prior to consent being given to conduct research, a written proposal must be submitted to the Band for its consideration.

The proposal should be sent to the attention of the Band Manager, 'Namgis First Nation, P.O. Box 210, Alert Bay, B.C. VON 1AO Telephone (250) 974-5556; FAX (250) 974-5900.

2)   The proposal should provide the following information:
       a)   Name, address, telephone number of the prospective researcher.
       b)   Title of research project.
       c)   Detailed project description, to be based on the principle of "full disclosure" and to include:

             i)   statement of research objectives;

ii)   proposed manner in which research will be carried out, including project phases and research methodology;

iii)   purpose of the research;

iv)   intended/proposed application of research results.

d)   Name of sponsoring agency.

e)   Name of funding agency or agencies.

f)   Names and addresses of three references (or letters of reference).

g)   Anticipated date of completion of project.

h)   Include also: curriculum vita of applicant researcher.

3)   The review and approval process is as follows:

a)   Assessment by the staff of the 'Namgis First Nation, or other designate of Council, for compliance with Band information requirements, including references check;

b)   Presentation of project proposal or request for information and all details relating to (2) to Chiefs and Council;

c)   Presentation to 'Namgis First Nation of all commentary and recommendations from staff and Cultural Advisors for final decision.

4)   Upon approval by the Band of the proposed research project, the next step is the formalization of mutually agreed upon conditions governing the following:

a)   conduct of research in the community;

b)   disposition and ownership of research data;

c)   copyright of resulting reports and publications.

There are usually set out in the form of a signed contract between the researcher and the Band.

A sample contract is attached. It should be noted that the Band generally requires:

a)   that originals of all tape recordings and copies of all field notes remain with or be provided to the Band;

b)   that copies of original research data not be disseminated to any third party (person or institution) without prior knowledge and consent of the Band, and;

c)   that the Band be consulted prior to the publication or public presentation of any outcomes of the research project.

'NAMGIS FIRST NATION

Guidelines for Visiting Researchers/
Access to Information
CONTRACT

I ___Kim vanderwoerd___, have read and understand the terms and conditions in the document titled 'Namgis First Nation Guidelines for Visiting Researchers/Access to Information' and hereby agree to abide by the 'Terms and Conditions' contained therein.

Date Signed: ___18 February___, 20 _02_

Signature ___Kim vanderwoerd___

'Namgis First Nation _____

Start Date: _01 March 2002_

End Date: _30 September 2002_

Please return this contract to: 'Namgis First Nation
Attention: Lawrence Ambers
P.O. Box 210
Alert Bay, B.C.
VON 1AO

Phone: (250) 974-5556
Fax: (250) 974-5900